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CURRENT TRENDS IN THE FINANCIAL SERVICES INDUSTRY AND THEIR IMPACT ON SMALL BUSINESS FINANCING

HEARING

BEFORE THE

SUBCOMMITTEE ON TAX, ACCESS TO EQUITY CAPITAL AND BUSINESS OPPORTUNITIES

OF THE

COMMITTEE ON SMALL BUSINESS HOUSE OF REPRESENTATIVES

NINETY-EIGHTH CONGRESS

SECOND SESSION

WASHINGTON, DC, SEPTEMBER 6, 1984

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CURRENT TRENDS IN THE FINANCIAL SERVICES INDUSTRY AND THEIR IMPACT ON SMALL BUSINESS FINANCING

THURSDAY, SEPTEMBER 6, 1984

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TAX, ACCESS TO EQUITY
CAPITAL AND BUSINESS OPPORTUNITIES,
COMMITTEE ON SMALL BUSINESS,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:40 a.m., in room 2359-A, Rayburn House Office Building, Hon. Henry J. Nowak (chairman of the subcommittee) presiding.

OPENING STATEMENT OF CHAIRMAN NOWAK

Mr. NOWAK. The subcommittee will come to order.

We thank everybody for coming and especially for submitting the kind of testimony you have. It is going to be very helpful in giving us a broader perspective of the impacts that we are looking for.

Today, we will continue our investigation concerning the recent changes in the financial service industry and their impact on small business financing. The continued safety and soundness of our Nation's banking system is critical to the economy as a whole, but is especially significant to the future hopes of the entrepreneur. For example, available statistics indicate that small firms are almost entirely dependent on commercial bank lending as a means to obtain external capital, especially since small firms have traditionally been denied access to the commercial paper and bond markets. In fact, a survey of banks by the Interagency Task Force on Small Business Financing indicated that small firms obtain approximately 70 percent of their credit from commercial banks.

It is this critical reliance by the small business community on commercial bank credit that led the subcommittee to initiate its investigation of the evolving bank deregulation scenario. Through this investigatory process, the subcommittee became aware of some specific concerns expressed by witnesses regarding the influence that the basic changes in our financial structure would have on small firms.

For example, one of the significant findings of the subcommittee's 1982 hearing was the fact that there is a critical shortage of data concerning small business borrowing, which renders comprehensive analysis of the availability of credit to small firms extremely difficult. Subsequent to these hearings, there were several studies performed by interested organizations in an attempt to fill

this information void. While I commend these groups for their efforts and input regarding this important issue, I firmly believe that we should continue our investigation into small business access to debt capital so that sufficient data will be available to formulate viable policy.

Another topic of concern derived from previous testimony was the future viability of community-based banks, particularly in view of the increased pressure to eliminate interstate banking restrictions. Small business borrowers have consistently maintained that their credit needs have been best served by a banker who is familiar with their business operations and the community in which they do business.

A final source of concerned expressed was the proposition that small business loans are perceived by many, including bank examiners, as being inherently more risky. Based on this presumption, the small business borrower would necessarily experience a greater degree of difficult in obtaining needed capital, and I might add, in obtaining that capital at a higher cost.

Although the above-mentioned issues specifically relate to various problems of small business lending, a thoughtful consideration of small business access to credit must consider the ramifications of the broad trends presently under way in the financial service industry.

For example small firms are extremely sensitive to high and volatile interest rates, primarily due to their limited alternatives in obtaining external capital. In fact, as a general rule, the entrepreneur has been forced to pay 2 to 3 percentage points above the prime rate to obtain needed capital. It is essential, therefore, to continue to develop information on the long-term impact of interest rate deregulation on small business borrowing.

The most recent developments in the financial community have aroused serious questions as to the continued stability of the banking system generally. For example, the near-failure and rescue of Continental Illinois sent shock waves throughout the financial community. Many financial analysts were disturbed by the high level of Federal commitment that was required to save a failing major money center bank. In addition, the small business community, though extremely concerned over the Continental crisis, has become increasingly wary about the fact that small banks are being allowed to fail. For example, the record level of 54 bank failures this year alone represents the highest rate of failures since 1939. Recent statistics indicate that over 700 banks have been listed as "troubled" by Federal regulators, requiring greater supervision by these regulators.

This recent surge of bank failures has placed a tremendous burden on banks, especially on the ability of small institutions to attract and maintain large uninsured deposits. Many large depositors, aided by the sophisticated technological innovations for depository transfers, are decreasing their deposit levels to the $100,000 insured amount in a variety of banks. Others contend, however, to the disadvantage of smaller banks, that large depositors' confidence in large banks has been bolstered by the protection offered larger depositors in the Continental rescue plan.

A further example of the weakened confidence concerning investments in depository institutions is the recent crisis at Financial Corp. of America, which owns the Nation's largest savings and loan association. As a result of new deregulation powers, the assets of Financial Corp. of America have grown from only $6.6 billion at the end of 1982 to $37.7 billion in June 1984. The recent troubles experienced by Financial Corp. of America demonstrate the significant risk of the heavy reliance of financial institutions on institutional depositors, who generally shift deposits from institution to institution in an effort to derive the greatest yield.

In conclusion, let me point out that the ultimate goal of bank deregulation was to open competition while maintaining the confidence, stability and integrity of our banking system. However, as the realities of deregulation unfold, I believe there is a critical need to analyze present structural changes in the financial system and to formulate an overall strategy for an orderly transition. In addition, it is essential that we closely scrutinize these occurrences so that future policy implementation will reflect the views and concerns of the small business community, including small banks.

With that brief opening statement, I wonder if my colleague, Mr. Roemer, would like to make a statement before I call the first witness?

Mr. ROEMER. Briefly, Mr. Chairman, first, thank you for holding the hearings, and second of all, my interest includes, but is not limited to, availability and cost of credit to small businesses, and if we could address those problems, the witnesses that we have today, it would be of great personal benefit to me.

I am concerned about the system. I do not want to do radical changes in the system, if not needed. These kinds of hearings will help arm us with solid information, as we review where we are in banking today, and how it might better serve this country.

So thanks again for having the hearings. I am going to leave briefly to give a 1-minute in a few minutes, but I will return. I will be sitting through the hearings and I look forward to them.

Mr. NOWAK. Thank you very much.

Implicit in the hearing and the request of the witnesses, are exactly those two points that you brought up, the continuing availability of credit, and certainly, the cost of that credit to the small business community.

With that, let me call our first witness. Let me introduce Mr. Alan S. McCall from the Federal Deposit Insurance Corp. He received his B.A. from Wittenberg University in Ohio, and his Ph.D. in economics from the University of Kentucky. Mr. McCall has been with the FDIC for the past 15 years, and has been widely published in a variety of financial and banking publications. He serves as a division representative on the FDIC's Board of Review and Committee on Liquidations and also assisted in drafting President Carter's Report to Congress on Interstate Banking. Mr. McCall actively participated in the Interagency Task Force on Small Business Financing as a member of its oversight committee. Welcome before this subcommittee, Mr. McCall, and I will state for the record that your testimony in its complete and unabridged form will be made a part of the record.

You may go from there.

TESTIMONY OF ALAN S. McCALL, SENIOR FINANCIAL ECONOMIST, AND CHIEF, BANK REGULATION AND LEGISLATION SECTION, DIVISION OF RESEARCH AND STRATEGIC PLANNING, FEDERAL DEPOSIT INSURANCE CORPORATION

Mr. McCALL. Thank you, Mr. Chairman.

Mr. Chairman, members of the subcommittee, I am pleased to have this opportunity to testify, on behalf of the FDIC, on the subject of current trends in the financial services industry and their impact on small business financing. If I may, I would like to submit my full statement for the record and simply summarize it orally. Thank you.

In my statement I focus on three areas: The dominant trend in the financial services industry, the ongoing deregulation of banking; deregulation's impact on the banking industry, the principal source of small business credit; and its ramifications for small business financing.

Deregulation the term for the dismantling of the banking system constructed in the aftermath of the Depression, is rapidly moving forward to more competitive, less regulated financial service markets.

The 1930's prohibitions and limitations on deposit interest rates basically have been completely removed; legislation separating banking from commerce is being eroded; restraints on geographic bank expansion are increasingly being rendered obsolete and ineffective and are being eliminated; the thrust of the 1930's legislation, to restrain bank competition and risk-taking, has been removed; and the Federal Deposit Insurance System is, as a consequence, in need of significant reform.

Deregulation is impacting both on the structure and the condition of the banking industry. The structural changes taking place are exactly those expected to occur in less regulated, more competitive markets. Higher rates of both industry entry and exit are being realized. Bank geographic markets and product markets are becoming less insulated and more competitive. Industry concentration, too, is rising as geographic banking barriers are reduced. Further deregulation portends substantial declines in the number of banks and banking organizations and acceleration in bank product and geographic diversification.

Bank deregulation, however, has not had a dramatic effect on the industry's current condition. Rather, the recent prolonged period of high inflation and high interest rates and international economic problems have been the most important detriments of the banking industry's condition, particularly its increased losses on both domestic and foreign loans, increased problem loans, lower earnings and record numbers of bank failures and problem banks.

Nevertheless, the industry is sound. Failures and problem bank numbers have peaked or will soon peak, and industry capital is rising. Further deregulation should not contribute to a sudden, dramatic shakeout of the industry in the future, but the numbers of bank failures and problem banks shall remain high.

Now, turning to the subject of deregulation and small business financing. The best assurance that potential small business borrowers and other locally limited borrowers will have consistent access

to credit on terms consistent with risk, prevailing interest rates and the overall supply and demand of savings will come from the maintenance of competitive financial service markets. Deregulation of banking is the only way to be certain of attaining such markets.

Bank product deregulation, in addition to its general competitive benefits, should positively impact credit flows and credit prices from the viewpoint of such locally limited borrowers as small businesses, as long as lending to such borrowers is as profitable as other investment alternatives available. Certainly, the evidence indicates that small business lending has been quite profitable, at least for the last several years.

In that same vein, some of the services banks now want to offer also could be very beneficial to small business financing, just as in past periods of bank product deregulation.

The concerns that credit may dry up or its price increase for small businesses competing with bank subsidiaries, or that tie-ins between banks and their subsidiaries would result and have serious adverse impacts on independent small businesses, are not valid concerns in competitive markets. The availability of other lenders eliminates the effectiveness of such tie-ins and abusive lending practices, should they occur.

Geographic deregulation, through its competitive effect, should also have a beneficial impact on the availability of credit and its price, but little or no impact on credit allocation. Money or credit already is extremely mobile, tending to flow to the areas or customers offering the highest returns regardless of geographic banking restrictions. Therefore further geographic deregulation is unlikely to significantly impact funds flows.

Concerns that geographic deregulation will necessarily disrupt or reduce credit flows to local communities and to particular classes of locally limited borrowers, or increase the price of that credit, are not well founded.

Not only are flows of funds not significantly impacted by geographic banking restrictions, but no substantive evidence is available indicating that broader geographic banking authority has adversely impacted these credit flows or prices.

In sum, further deregulation of banking is necessary and is in the American public's best interest, resulting as it will in more competitive and efficient financial markets.

Concerns raised over the possible negative impact of further bank deregulation on small business financing are not warranted. Competition in financial service markets will assure that small business credit needs will continue to be met, as long as small business lending remains one of the most profitable investment alternatives available to banks and other individual and institutional lenders.

Thank you.

[Mr. McCall's prepared statement and followup letter follow:]

PREPARED STATEMENT OF ALAN S. MCCALL, SENIOR FINANCIAL ECONOMIST, AND CHIEF, BANK REGULATION AND LEGISLATION SECTION, DIVISION OF RESEARCH AND STRATEGIC PLANNING, FEDERAL DEPOSIT INSURANCE CORPORATION

Mr. Chairman, members of the Subcommittee, I am pleased to have the opportunity to testify -- on behalf of the FDIC -- on the subject of current trends in the financial services industry and their impact on small business financing.

My statement today focuses, as requested, on three areas: the dominant trend in the financial services industry--the ongoing deregulation of banking; its impact on the banking industry, the principal source of small business credit; and its ramifications for small business financing.

Bank Deregulation

Deregulation -- the term for the dismantling of the banking system constructed in the aftermath of the Great Depression -- is rapidly moving forward on an irreversible path to more competitive, less regulated financial service markets. The 1930s prohibitions and limitations on interest paid on deposit accounts basically have been completely removed; legislation separating banking from commerce while still in place is very gradually being eroded and changed; restraints on geographic bank expansion are increasingly being rendered obsolete and ineffective and are gradually being eliminated; the thrust of the 1930s legislation -- to restrain bank competition and risk-taking -- has been reversed; and the federal deposit insurance system created at that time is, as a consequence, in need of significant reform.

However, the fact that deregulation is only fully in place on the liability side of bank balance sheets greatly concerns the FDIC. Asset and geographic restraints are not in the best interests of the American public, resulting only in inequities, inefficiencies and noncompetitive markets.

Moreover, banks and other depository institutions are placed at a competitive disadvantage in the financial marketplace. Without further deregulation, bank opportunities to pursue new business and to diversify their asset risk and deposit base will continue to be quite limited, particularly for smaller institutions.

The additional risk to banks in a deregulated environment is being borne by the FDIC, in large part because the FDIC continues to operate under fifty year old constraints. Fixed deposit insurance premiums do not discourage excessive risk-taking. Moreover, the potential rewards from risk-taking accrue only to the bank stockholders' benefit while the Corporation bears final responsibility in the event of a bank failure. Fixed insurance costs also serve to penalize prudent banks since all share the cost of insurance. The FDIC insurance system probably has always provided for such perverse results, it simply was not a concern previously because of the tight restraints on competition and risk-taking.

The FDIC feels strongly that the deposit insurance system should be changed to reduce or eliminate such perverse results. Basically, the cost of insurance must be raised and/or the insurance coverage reduced. To achieve these goals, fixed insurance premiums must be eliminated and market discipline of banks must be increased. As you are aware, we have proposed such changes in HR. 5738 and in other actions.

Impact On The Banking Industry

Deregulation, in conjunction with the recent extended economic conditions of high inflation and high interest rates, is impacting the banking industry's

structure and its condition.

The structural changes taking place are exactly those expected to occur in less regulated, more competitive markets. Higher rates of both industry entry and exit are being realized; the present entry rate slightly exceeds the rate of mergers, acquisitions and failures. Industry concentration too is rising as geographic banking barriers are reduced; the industry market share held by the 100 largest banking organizations has increased considerably because of the growth of regional banking organizations, not because of any growth of the ten largest organizations.

Further geographic deregulation portends substantial declines in the numbers of banks and banking organizations. In states already permitting statewide branching, the declines would be steady; in other states, the number of banks or bank organizations, or both, would decline suddenly and dramatically.

Barring Congressional action, nonbank financial and nonfinancial institution entry into banking will steadily proceed. Bank entry into nontraditional activities too shall continue through loopholes in federal laws and regulations and through individual state authorizations; further deregulation shall speed up bank product diversification and enable more efficient entry.

The banking industry's condition is being impacted principally by the recent prolonged period of high inflation and interest rates and by international economic problems. These economic conditions have resulted in major problems for many banks during the last few years. Business failures

have been at or near historic peaks, losses on both domestic and foreign loans have increased as have problem loans. Banking industry earnings are down. Increased numbers of bank failures and problem banks, which are at new heights, evidence these problems. However, the industry failure rate even now is less than 0.5 percent per year, which is less than that in some other regulated financial industries and far less than that in unregulated industries.

Nevertheless, the industry is sound, failures and problem bank numbers we believe have peaked or will soon peak, and industry capital is rising. Small banks with less than $100 million in assets continue to be more profitable than larger banking organizations, although the spread is narrowing. Further deregulation should not contribute to a sudden and substantial shakeout of the industry in the future, but the numbers of failures and problem banks shall remain high relative to their levels from the 1940s to the late 1970s, when banks were highly regulated and their competition restricted.

Proposals to reform the deposit insurance system and the financial institution regulatory structure would benefit the banking community in general and the banking system in particular, but have few ramifications for small business financing. Deposit insurance reforms would redistribute insurance costs to problem banks and to banks with foreign deposits. They also would reduce the costs of the dual regulation and supervision on small banks in particular. These changes should allow most banks to more efficiently and effectively operate and compete, to the overall benefit of financial service customers.

Regulatory restructuring proposals for the uniform regulation of banks and thrifts and for the uniform functional regulation of all financial institutions would yield similar competitive benefits.

Deregulation and Small Business Financing

The best assurance that potential small business borrowers and all other borrowers have consistent access to credit on terms consistent with risk, prevailing interest rates and the overall supply and demand of savings will come from the maintenance of competitive financial services markets. The continued deregulation of banking and other depository institutions is the only way to be certain of attaining such competitive markets. Deregulation and increased competition, however, will not assure that every potential borrower receives the funds desired or the interest rate desired. Credit will be allocated efficiently and equitably on a risk-return basis.

The available evidence clearly indicates that impediments to free market behavior and thus to competition have adversely impacted consumer and small business financing. In times past, disintermediation and usury ceilings have disrupted credit flows, raised credit standards, rationed riskier customers out of the market, and made available financing even more costly and difficult to obtain. Particularly hard hit by these developments were small businesses, housing, and state and municipal financing. Deregulation of deposit interest rates and federal preemption of state usury ceilings should preclude the recurrence of these perverse results.

Deposit interest rate deregulation has substantially increased the supply

of loanable funds as banks are free to compete for deposits, to reclaim market share lost to unregulated money market funds and to realize substantial inflows of "new" money. It should allow a more stable source of funds over the interest rate cycle and provide a more sound financial footing for banks, the primary institutional source of credit for small business. Access to funding should be assured at competitive market prices.

Bank product deregulation also should serve the public's best interest. Bank entry into other financial service markets and other institutions entry into bank product markets will yield considerable competitive benefits to users of financial services in particular and to the public in general.

As long as lending to such locally-limited borrowers as small businesses is as profitable as other investment alternatives, deregulation should positively impact credit flows or credit prices from the viewpoint of such borrowers. Since many large banks and other commercial and individual investors have expanded into small business loan markets during the past several years, small business lending must be quite profitable. Large banks, for example, have established small business lending units within the bank as well as outside the bank in venture capital, finance company, SBICs and MESBICs, and other subsidiary operations not restrained by geographic banking barriers. Pension funds, insurance companies and securities firms also have increased their presence in small business debt and equity markets.

Bank product deregulation in the past apparently worked to the advantage of small business borrowers, not to their detriment. Many of the just-

mentioned bank activities and subsidiary operations were spawned specifically to serve the financial needs of small business and other locally-limited borrowers.

In that same vein, some of the services banks now want to offer also could be very beneficial to meeting the financial needs of small business. Both equity financing and securities underwriting, for example, could well increase the supply of funds to small businesses from banks, as well as from others in the private sector, and/or reduce its cost.

Additional concerns that credit may dry up or its price increase for small businesses competing with bank subsidiaries, or that tie-ins between banks and their subsidiaries would result and adversely impact independent small businesses, are not valid concerns in competitive markets. Only in noncompetitive markets where other lenders are unavailable to eliminate the effectiveness of such tie-ins and abusive lending practices could they occur. However, since such behavior is illegal, it may not be a substantial concern even in noncompetitive markets. Nevertheless, competition is the best, most effective safeguard against such behavior.

The fact that evidence of such tie-ins and abusive lending practices is sparce also does not give credence to these concerns. Other financial institutions have been affiliated with a host of financial and nonfinancial firms for many years. Similarly, individuals have owned banks and a host of other businesses in their local communities for many years. In neither instance is there any substantial record of complaints or abuses, or that such affiliations have been harmful.

Removal of geographic restraints on bank operations offers further competitive benefits to the public in general and to the users of financial services in noncompetitive markets in particular. Through its competitive effects, geographic deregulation should have a beneficial impact on the availability of credit and its price, but not on credit allocation. Because money or credit already is extremely mobile, tending to flow to the areas or customers offering the highest returns regardless of geographic banking restrictions, further deregulation of geographic banking restraints may have little effect on where funds flow.

The concerns that geographic deregulation will necessarily disrupt or reduce credit flows to local communities and to particular classes of borrowers such as locally-limited small businesses, households and farmers, or increase the price of that credit are not well-founded. Not only are money or credit flows not significantly impacted by geographic banking restrictions in theory, but no substantive evidence is available to my knowledge that indicates that broader geographic banking authority has adversely impacted these credit flows or prices. Neither dramatic declines in the numbers of banks nor the geographic expansion of large banking organizations has had such adverse effects. Apparently as long as local credit demands by small businesses and others are as profitable as nonlocal demands, credit will be available from banks and other lenders.

The principal competitive benefits from further geographic deregulation would result from the lower barriers to entry, which appear to be a primary

determinant of competitive levels of performance. With geographic deregulation, the intense competition seen in international and national loan and financial service markets should spread more rapidly to small local markets.

Conclusions

In sum, further deregulation of banking is necessary and is in the American public's best interest. Competition will increase in financial markets as existing regulatory inequities and burdens are reduced and eliminated.

The concerns raised over any negative impact of further deregulation of banking on small business financing are not warranted. As long as small business lending remains one of the most profitable investment alternatives to banks and other individual and institutional lenders, small business credit needs will continue to be met.

FDIC
Federal Deposit Insurance Corporation
Washington, DC 20429
Division of Research and Strategic Planning

50 Years of Confidence 1933 - 1983

September 20, 1984

Honorable Henry J. Nowak
Chairman
Subcommittee on Tax, Access to Equity Capital
and Business Opportunities
Committee on Small Business
House of Representatives
B-363 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Nowak:

I am writing to clarify my September 6th testimony on bank deregulation and its impact on small business financing before the Subcommittee on Tax, Access to Equity Capital and Business Opportunities.

In response to questioning, I indicated that complete bank product deregulation would be acceptable and that other new legislation or regulations to assure that such deregulation would not adversely impact the financing of independent small businesses would be unnecessary.

I was not suggesting that the FDIC proposes such far-reaching legislation, or that the FDIC favors further bank deregulation without aditional legislative actions. As I indicated in my testimony, deposit insurance system reform is extremely important. An insurance system must be established that will more effectively deter banks from excessive risk-taking than the present system. Insurance costs must rise with risk and marketplace discipline must increase to adequately discourage banks from such risk-taking.

I shall be happy to answer any questions that you may have or be of any further assistance.

Sincerely,

Alan S. McCall
Senior Economist and Chief
Bank Regulation and
Legislation Section

Mr. NOWAK. Thank you very much.

I will ask Mr. Roemer to ask his questions now.

Mr. ROEMER. I have one question of our witness.

Would you limit in any way the move to deregulate the banking industry? You have said in your opening statement that you think further deregulation is in the best interests of all Americans, if I can put it that way.

Would you restrict that deregulation in any way? Why regulate banks at all?

Mr. MCCALL. We are in a state of transition. The deposit insurance system that is in place is in drastic need of reform, and until that reform is made, we really need to continue to go slow. Even after the reform effort, there are problems that we recognize will emerge that will still encourage the rather slow or gradual expansion of banks into a host of activities.

We realize that banks are not going to go wild, even if all barriers were eliminated. They will very gradually move into those areas that they believe are most profitable which are the ones in which they currently want greater operating authority.

Mr. ROEMER. The question was, would you restrict the deregulation move in any manner? Your answer is, only by time. It should be done slowly. You gave us no restrictions at all on where banks could go, should go, and I just want to know what your feeling is.

You have thought through the question of whether you believe in more deregulation, you do. Have you thought through the question of where would you regulate, if at all?

Mr. MCCALL. Personally, I would not regulate at all.

Mr. ROEMER. You think a bank is just like a 7-Eleven?

Mr. MCCALL. If it so wanted to do that, that is fine.

Mr. ROEMER. Thank you. I disagree, but thank you.

Mr. NOWAK. Let me get some background, if we could, on this whole deregulation question.

I wonder if you could describe why the United States as a Nation, turned to regulation? Where did the call come from for regulation in the 1930's? How was that rate put into effect and the reserve requirement started?

Mr. MCCALL. Most of the major legislation that limits banks today emanates from the Depression period, and its aftermath. The early thirties resulted in the Glass-Steagall or Banking Act, McFadden Act, et cetera.

Out of that came the prohibitions on interest payments or demand deposits, checking accounts, limitations on other forms of other savings accounts.

Geographic restraints were strengthened by the McFadden Act. The Douglas amendment to the Bank Holding Act in the fifties put in place further restrictions on bank holding company operations interstate.

The current separation of commerce and banking came out of the Glass-Steagall Act.

Mr. NOWAK. What one group or one segment of society called for rate regulation, and why? Where did it emanate?

Mr. MCCALL. It was a crisis period, definitely. It is our belief that Congress overreacted at that particular time in imposing certain of these constraints.

Mr. NOWAK. Did the banks themselves ask for that rate ceiling?

Mr. MCCALL. Certain of the small banks did I believe, although I was not present. My recollection from reading some of the testimony from that period is that many of the small banks felt that they were unable or unwilling to pay competitive rates, that much of their money from rural areas was being sent to large money center banks, et cetera.

And so, therefore, they were very much in favor of many of these constraints. Certainly, all of the analyses that have been done of that period of time, with respect to price competition, flows of funds, and other considerations, really suggest that the then-current interpretation of the banking problems were inaccurate.

There was no evidence at that time that price competition nor flows of funds were, as was being made out, the problem behind or the cause of the banking collapse on that era.

Mr. NOWAK. There was a regulation in effect until just a few years ago, and we have had an expanse of the economy. We have had a world war, and had a relatively stable situation from that point in time to the present.

Mr. MCCALL. That is right.

Mr. NOWAK. I am trying to determine what part that played in the whole interest rate setting throughout that period of growth when the interest rate was 2 to 2.75 percent above inflation. Throughout the fifties and the sixties, and in the growth period, housing expansions were all aided to a great degree by that kind of a rate structure. We are now in a competitive situation, because with deregulation we have the competition that is called for. As for dollars, money would seem to flow to those who are paying the highest rates of return, or at least the highest rate of return when you would adjust the risk within that deposit or investment. Won't this tend to hold that rate up above that inflationary cycle, no matter what it is?

Mr. MCCALL. You seem to be asking why the real rate of interest is not 3 or 2.5 percent, as it traditionally has been, but rather, why it is 6 to 8 percent?

Mr. NOWAK. That is as a result of it. Go ahead.

Mr. MCCALL. In that regard, it is more, I believe, that there has been a crowding out in the financial markets. The budget deficits over the past 4 years have contributed immensely to that, and have driven interest rates up.

Investors at this point are, really questioning whether or not the Congress, the administration and the country will come to grips with the budget deficit problem, and effectively reduce these deficits?

If there is firm evidence of that, then there is reason to believe that long-term rates will come down. This will be gradual, however, given some of the budget proposals or amendments that have been considered to this point.

Mr. NOWAK. Compare the statements that have been made and the concern over the small banks being treated differently, both the rescue kind of situations, with the Illinois "rescue" plan and what has happened with the smaller banks that didn't have that advantage. Do you see any contradiction there in the Federal Reserve response to those? Will it change in the future?

Mr. McCALL. I suspect it will. Part of this has to be put in some perspective. Historically, large banks have been treated differently in times of crisis than have small banks, and moreover, even in most recent times, that disparity still exists.

Small banks have had a greater probability of being paid off in the event of failure than have larger banks. Penn Square is among the larger banks that have been paid off to this point.

What the FDIC believes, which is also incorporated I believe in the Bush task force recommendations, is that the deposit insurance system has to be reformed.

There are various facets to that reform effort, one of which may well be to move to a modified payoff system whereby uninsured depositors and all general creditors receive some portion of their uninsured funds in the failed banks immediately, rather than nothing at all as would be the case in a traditional payoff. Traditionally, they would only realize recoveries as the failed bank's assets are substantially liquidated by the receiver.

The modified payoff would lessen the damage to local communities, and 447 below foster market discipline of banks over a greater size range than at present. Basically, we think, it would allow us to treat small banks and larger banks with more equity than has been in existence in the past.

Mr. NOWAK. Is that being drawn up in some type of regulation form to be presented?

Mr. McCALL. Yes. H.R. 5738, I believe, which we submitted to the House several months ago, contains many reform 456. Its counterpart is on the Senate side. The Bush group adopts many of those recommendations, and their report is due out within the near term.

Mr. NOWAK. Going one step further, the insurance premium structure is fixed. There has been a lot of talk about having an adjustable rate premium. Can you tell us where you are on the complaint about the foreign loans by the large money center banks that are not paying their fair share?

Mr. McCALL. In our submission to Congress, H.R. 5738, we did not include the recommendation that deposit insurance assessments be placed on foreign deposits of U.S. banks.

Other Members of Congress have recently made a proposal to that effect, and we would support that wholeheartedly.

Mr. NOWAK. Have you thought about how you would put together a so-called adjustable rate premium?

Mr. McCALL. Yes; we have. That is also discussed in that bill. Basically, the variable premium system that we have available for use at this point is very rudimentary.

We don't think that it initially will be very effective and allow us to reduce our regulatory and supervisory efforts. We think it has to be made much more sophisticated. Basically, the available system would look to three principal factors: Capital, interest rate risk, and asset quality.

Since we don't have a very sophisticated system at this point, we don't want to go out on a limb and put full faith in it.

We recognize there will be a transition over time, during which we are going to develop a much-improved system that will be more effective.

As that happens, the need for regulation and supervision will diminish. Variable premiums will really make banks adverse to certain levels of risk taking, for there will be high costs associated with high risk.

Mr. NOWAK. One of the other factors mentioned was the type of market discipline that your investigations and reviews are going to have on the smaller institutions. I wonder if you could tell us if there is a larger differential? Also, when a review team goes into a bank that has small loans as opposed to the larger institutional or foreign loans, how would you look at that in terms of the security of the bank?

Are there changes in that area that the smaller banks can look forward to, or don't you visualize any difference at all?

Mr. MCCALL. Not being an examiner, it is more conceptual from my viewpoint. Certainly, over the last several years, large loans, any loan concentrations, be they present in small or large banks, have been given increased attention by the examiners. It is not the $10 and $15 loans that are going to bring the bank down, but loan concentrations in any form, be they foreign, industry, et cetera.

Frankly, that is the approach the FDIC is increasingly using. If there had been a disparity in the past, that disparate treatment of small loans versus large loans has largely disappeared by now, because there is an increased recognition that it is not the small loans that are going to bring the institution down.

Mr. NOWAK. Another problem that had been advanced here is the withdrawal of the so-called deposits from a smaller or medium-sized bank, taken out of that bank and put into a larger institution. I wonder if you have any figures on the amount of money that has been transferred recently, and the kind of impact that will have on the smaller institution's ability to attract depositors in the future?

Mr. MCCALL. I am not sure any hard numbers on this issue exist at this point in time, or will ever be available. If you are talking particularly about brokered funds, we only began collecting such data about a year ago.

Basically, what we have found is that most banks are really not utilizing brokered funds and, if they are, generally not to a great extent. It is limited to several hundred banks, and by and large, the percentage of deposits that they are acquiring through brokers typically ranges up to 10 to 20 percent in most cases. About 10 percent of these banks have brokered deposits in excess of 20 percent of their deposits.

Regardless of size, if banks receive adverse publicity of impending failure, as we have seen over the past years since the failure of Penn Square Bank, funds will flow out of the banks. But there is no indication at this point to my knowledge that smaller banks generally are being particularly affected or hard hit by outflows simply because they are smaller institutions. Moreover, there is no new reason why such deposit outflows should occur since the risk of loss to uninsured.

Mr. NOWAK. Well, we have other testimony following yours from the Independent Bankers Association and some others. Perhaps that will help to shed some light on that question.

We had a terrific transfer when the money market funds were started. It built up to something like $238 billion at one point in

time, and has come back down to $172 billion still in those kinds of accounts. If there are no restrictions put on those types of accounts, and you have all the other competition for money, you do not see any problem of the competition tending to surface through all of that to the highest interest rate someplace.

As the money gets filled up, there is going to be a second highest interest rate, where loaning policies of those institutions are no longer based upon a regulated 5.25-percent rate, but a very realistic and practical cost of money rate. That becomes their product, and the cost of their service is going to stay at 9.25, 9.5, 9.75, or some mix of all of those. I am wondering how this will start to rescale down.

Suppose inflation stays at 4 and 5 percent. Have we now turned the structure around, so that it will not be able to come down again, regardless of inflation? Inflation is a base now at 4 percent, and we have a 12-percent or 12.5-percent rate. If inflation does come up again, are we going to have a spread? In other words, do you think that the spread between your inflation rate and the prime or small business lending rate is going to stay 8 or 9 percent?

Mr. McCALL. No; I do not. The reason for that answer is basically, I have faith in the Congress and the administration that something will be done about the budget deficits, and that is really what is going to bring down interest rates. If deficits are not reduced, those rates are going to remain high, but if some action is taken to reduce these deficits, then long-term rates are going to come down, and that will also bring to bear pressures on the level of short-term rates.

It is the crowding out effect that now has driven short-term rates as high as they are and keeps them there.

Mr. NOWAK. Some time ago, I looked back to the fifties, and sixties, and tried to make an analysis, to see whether the deficits were higher or lower in any given year. It was difficult to make a correlation between the real rate of interest and the budget deficits.

In some years, you had a very high deficit, and you had a smaller, or the same spread, when we had the regulated rate. It would seem to me that there are some theories in the Congress now, many advocated by a group of economic theorists who call themselves supply-siders, which say that the budget deficits have no effect on the economy one way or the other anymore. You tend to agree with that, but then you look at the accumulation of the deficits over a period of time, and the larger numbers that are coming up, and I guess that in 4 years we are going to end up just about doubling the previous 200 years of deficit, from about $910 million to about $1.8 billion, when all the accumulating is complete.

We are somewhat concerned about the impacts of that, but you are relating it directly to the rate. I do not know that you should go through this whole study and try to correlate that. You know, we had a period of time where you had a deficit over 50 percent of the gross national product.

I even went through that long analysis and it did not show anything, either, but I just do not know if that deficit were zero today, that that would have an impact if that rate is up there, and you say there is a crowding out.

I don't know where that is occurring. The banks seem to have money to loan, despite the size of the Federal deficit. I have the concern more of a cumulative nature than the 1-year kind of impact.

But do you have anything that you can point to with either in the past or your analysis would show that you have a direct relationship between this deficit, the 1-year deficit?

Mr. McCALL. There are a whole host of studies, and whether they come from supply-siders, or more traditional economists, you could find some evidence on either side of the fence. My own personal and professional inclination is that former Chairman of the CEA, Martin Feldstein, was quite accurate in his assessment of the current situation. I know that this does not please everyone here in town, but I really side with him. In effect, if we reduce those deficits, we are going to see interest rates come down.

If we don't, then we are going to see increased inflation, and therefore, we will see reduced real rates of interest, perhaps even your 3.5 percent real interest rate or less, where the real rate is the difference between nominal interest rates and inflation. However, nominal rates may well be above their current levels.

Mr. NOWAK. I am going to wait for the first bank to advertise. Everybody will put in the paper: "Come here for 9.25 percent for 3 months, 12 percent for 3 years, simple and compound interest." The first page will say: "Come to our bank, we will give you only 8.5 percent so we can loan out money lower." Watch all the money flow to that bank.

I don't know what is going to motivate the banks in a competitive upward situation now. We have turned this thing right around.

Mr. McCALL. The problem that we are having is that many investors, both in banks and in other financial institutions, have some lack of faith in the ability and willingness of the Government to address the budget deficit problem. Therefore, their expectations are that those deficits will continue to mount, and therefore, rates are going to stay high.

Armed with that belief, if they can buy money at anywhere from 10 to 13 percent, whether it is short term or longer term, they feel they may be getting a deal. They are banking on governmental inaction on the deficit situation.

Mr. NOWAK. When you go back for the last 35 years, is there any correlation between a higher than normal deficit and the interest rate?

Mr. McCALL. Yes; I believe so, certainly in the last several years, depending on the lags that you introduce to the model, et cetera. Such evidence is sparce though, because deficit spending may historically be more frequent and substantial in economic downturns when interest rates typically are at relatively low levels. This of course is not the situation today nor the projected situation for the next few years.

Mr. NOWAK. We have variations. Let me turn to Mr. Roemer.

Mr. ROEMER. Thank you, Mr. Chairman.

A question back on the focus of our hearings on small businesses, are you uneasy at all with the kind of a double standard for depositors and the insurance against risk vis-a-vis a failure of Penn

Square; an impending failure at Continental Illinois, specifically, depositors over the $100,000 threshold were not protected in one, and by the backing of FDIC and other official statements, large depositors were protected in the other.

Are we sending a signal to small business that you ought to place your money above the $100,000 level in as large a bank as possible, because the failure of that size bank will not be permitted in the system, and therefore, we will protect your investment?

You see what I am saying? I sense that out in the countryside. Do you, and if you do, what would you do about it?

Mr. MCCALL. I think you were absent when I addressed this.

Mr. ROEMER. I was. I am sorry if you have already answered that. You can just say amen.

Mr. MCCALL. I said that before I came in here. I think, really, what we have now in the current situation is exactly that which we have had historically. Whether you go back 3 years, 5 years or 30 years, basically it has been the small banks which have been paid off, where uninsured depositors and general creditors have been at risk. Historically, such depositors in large banks have been highly protected.

We have had this situation in several large institutions over the years, such as when a $10 billion bank in Philadelphia that basically was on the verge of failing in 1980 and assistance was provided. We had a large savings bank in New York, same result.

It is the viewpoint of the corporation and other agencies, including the Bush Task Force Group that the system, the deposit insurance system, has to be modified in part to eliminate that very inequity.

One possibility which we have utilized on an experimental basis to eliminate some of that inequity is the modified payoff. With the modified payoff, we can certainly increase depositors' and general creditors' risk of loss in much larger institutions than we can at present. Remember 10 or 15 years ago, there probably would have been little or no thought to paying off on a $100 million bank failure, and effecting losses on uninsured depositors and other creditors.

Two years ago, we had a failure and payoff of a $500 million bank, and we have come close to payoffs in some other cases. The modified payoff may be a means of further eliminating these inequities based upon bank size. While this has been the case historically, it is bothersome.

Mr. ROEMER. To reopen, not to reargue, bank regulation for general public interest, are you bothered at all by the general argument of money and power or somehow related and concentrations of one will yield concentrations of the other, and a small business man or woman is at the mercy of that kind of concentration when he or she visits the bank to borrow money?

If the bank insisted, along with loaning the money at a profitable rate of interest, insisted on peripheral activities in conjunction, insurance, for example, does it bother you enough to review your deregulation push, or are they unrelated?

Mr. MCCALL. It doesn't bother me at all.

Mr. ROEMER. You have never borrowed any money in my State. No; I am just kidding. I am out of order.

Mr. McCALL. Tie-ins, it really seems, are not going to be a problem. From my viewpoint, at this time, the evidence I have seen is that there are adequate antitrust laws and other laws on the books, for the banking agencies, et cetera, to preclude that kind of activity.

It will occur in isolated cases, but if the public is aware of the thrust of these laws, then there is no reason that they cannot take action against the institution. However, it really seems to me that the key is to have competition in that marketplace. Competition is the best, most effective deterrent to such abusive practices. They cannot be effective in competitive markets.

It is only the monopoly banker or finance company or whoever, or the monopoly grocery store who can really exploit the individual consumers. We don't hear of great abuses along these lines. Occasionally, you will see a newspaper and see that suit has been brought because of tie-ins, but they are very infrequent.

We have a whole host of nonbank financial institutions that own banks and other financial institutions; we don't hear of complaints there. We have individuals who own banks, and also the local mortgage banking firm, the grocery store, et cetera, and yet we do not hear claims that there are problems. Therefore, it is my view that basically we have to attribute this to competitive marketplaces and existing antitrust laws.

Mr. ROEMER. Would you be willing to concede that one of the reasons you are not inundated with such complaints, tie-ins, is certain restrictions in the law like Glass-Steagall and others that do raise the specter, when a consumer complains—well, maybe I take your comments to the illogical conclusion.

I assume that you would do away with Glass-Steagall or Douglas-McFadden.

Mr. McCALL. Yes, sir.

Mr. ROEMER. Maybe I am wrong, but it seems to me, and I have some limited experience in the area, I have started two banks of my own, and since sold them, so I am not in the banking business any more.

But I started from scratch two banks that today are about $85 million each in a small local community of about a quarter of a million people, dealing on a daily basis with people whom we would describe as small business men and women, and the tie-in problem, or the threat of same, I think, is real, and Glass-Steagall and other restrictions afford some protection, not just to the system, but to those who enter the system.

I would love to see the accumulation of evidence that you have obviously not in your grasp that says that competition—remove the barriers—can solve these problems. I just don't see it.

Mr. McCALL. There is some disagreement between us, part of it communication. I certainly would agree with you that the threat of tie-ins would be greater if you get rid of all these production restrictions on banks, et cetera.

No question of that.

The questions really are whether or not there would be actual violations, or actual tie-ins put in place, and whether they would be effective. I believe that so long as markets are competitive, attempted tie-ins really cannot be effective.

Moreover, so long as consumer awareness of antitrust laws is such that they know what their rights are under existing law, there is no reason for them not to come forward when they have instances of abuse. Nevertheless, I really think it is competition that is going to drive that result—making ineffective attempted tie-ins and other abusive lending practices. We are in agreement, however, that there is an increased threat of tie-ins. I just don't believe that, so long as we have competitive marketplaces and adequate antitrust laws. At this point, I think antitrust laws and bank regulations are adequate, and barring some further information that would conflict with this conclusion, we can go forward with further bank deregulation.

We don't need all these constraints. It seems to me that we are putting up or maintaining barriers to banks getting into the X, Y, Z financial services, without much basis and ignoring the possible public benefits from further deregulation.

Many people have benefited in the last few years, and we have seen it with respect to interest deregulation. Certainly, depositors have gotten higher rates of interest and in a sense, really, market rates of interest perhaps for the first time.

Savings banks, for example, have been allowed to get into life insurance sales and underwriting and in New York and New England they have been able to claim and advertise, and there apparently have been few disputes that their life insurance premiums are among the lowest in the Nation for small insurance policies.

We have banks getting into discount brokerage where the discount brokerage rates they are charging are half of what you would pay if you went to a full-service brokerage house.

Those are significant benefits, and we seem to forget about the possibility of realizing similar benefits from allowing banks to get into other activities and other firms to get into banking or financial service markets, generally.

Mr. ROEMER. It would be a mistake on my part to paint this in exaggerated terms. I don't want you to misunderstand my personal feeling. I, too, believe in competition. I, too, believe in deregulation, but there are limits in the practical world.

It is like Einstein, who came up with the Theory of Relativity and was quoted in his autobiography as saying that the crucial first step was to test the theory of contrary opinion and when it comes to the banking system, fair regulation means more competition, not less, and that is where you and I disagree.

I am just going to tell you, I am 40 years old and am often wrong, never in doubt, but often wrong, that in my experience, a small businessperson is not flooded with offers of money, that the marketplace constructed now or in your wildest dreams will not yield the average small businessperson a plethora of options, and they do feel threatened, they do feel threatened by the money tie-ins.

Now, you might dismiss that, but take it as one small voice, it is true. Maybe then you think it through, you will come to the same conclusions. I just feel that it is more real than you give it credit.

Mr. MCCALL. I am glad you prefaced your conclusion as you did. I think one other aspect of the evidence that somewhat suggests the incorrect nature of your view is that over the last several

years, banks increasingly, as have other investors, have gone into smaller business loan markets.

They have realized suddenly, because of the competition in international and national markets, that they can make a lot more money by searching out these smaller loan markets, be they regional, statewide, or smaller geographic markets.

Banks have gone into venture capital firms, because they realize the profits are there, perhaps more than what they can earn in the international loan markets.

It is such competition as this that is driving profit margins down, and loan rates down, Mr. Roemer.

Mr. ROEMER. I respect your comments very much, and I will study your statement. I just feel that you talk in national cyclical truths, that 4 years ago, if you were here as a witness, you would find that the banking centers in this country were making international loans, because they could make big bucks quick, and ignoring small business, and now it is swinging the other way.

It is the short run I worry about. The advantage of fair regulation in my opinion is increased competition, increased option and credit available at rates we can afford. That is my dream, and I don't see your scenario achieving it day in and day out.

Thank you, Mr. Chairman.

Mr. NOWAK. The Justice Department, I understand according to testimony, has talked about the increased levels of concentration, and they broke it down into 318 SMSA's, or banking markets. They then said that the banking organizations in those 318 areas could be reduced from 6,583 to 1,801 banks. This would reduce the average number of banks in the SMSA from 20.7 to 5.7, which would tend to reduce the offerings of banks in an area.

You talk about increased competition. How does that really correspond to your conclusion? Are 1,801 banks better than 6,000 banks? How do you rationalize it?

Mr. MCCALL. The available evidence that exists with respect to broader geographic banking authority does not suggest that the numbers of banks in local geographic markets will drop dramatically.

Moreover, there is some evidence from New York, from Virginia, and from some other States that suggests that the number of banks operating in local market areas may well increase with diminished geographic banking barriers.

Mr. NOWAK. I don't have that testimony in front of me, but I am looking at other testimony here that was presented by the independent bankers. They quote a researcher at the Fed who recently did a computer simulation of the concentration among banks that would be allowed under the current antitrust guidelines if geographic restrictions would be removed. The results, which were presented to the Banking Committee in May, gave the kinds of numbers that I just quoted.

Perhaps you could go and look at those.

Mr. MCCALL. If you put it in this broader sense, current antitrust laws do not adequately address the expansion of California banks, for example, into other States within this country, whether it is by opening offices or acquiring other institutions.

In the past, I have written, as have fellows at the Board of Governors, and others, that antitrust laws are in need of governmental address at this point.

The argument of potential competition has been rendered ineffective by the courts. You cannot realistically stop a large bank in California, for example, from entering another State on the basis of existing antitrust standards.

We have suggested in past congressional testimony that the Judiciary Committee take up the question of the adequacy of the antitrust laws and standards. It bothers me and others that we can have these enormous acquisitions, whether they are one big bank in one area acquiring another big bank somewhere else or a large insurance company buying a large bank or vice versa.

This question has to be addressed for it really focuses on the nationwide concentration of banking and the financial services industry in the future. Antitrust laws and standards are in need of great review.

Mr. NOWAK. Thank you for your testimony. Certainly we will have ample opportunity to review it, and then I think we will have further questions. Thank you for your appearance here, and we will keep the record open for a while as we develop more specific questions and get them to you. I hope that either you or someone on your staff can stay for the other witnesses, in order to get the feel of their opinion, too.

Mr. MCCALL. I would be happy to, and if there are further questions that arise, I will be happy to answer them.

Mr. NOWAK. We are now going to go to the Independent Bankers Association of America, and we will call up Robert B. MacDonald, president of the State Bank of Chittenango. Mr. MacDonald has been working with small banks for the last 20 years. He is a New York State director of the IBAA, and is on its Federal Legislative Committee. I want to welcome Mr. MacDonald to the subcommittee hearing today.

TESTIMONY OF ROBERT B. MacDONALD, PRESIDENT, STATE BANK OF CHITTENANGO, NY, REPRESENTING THE INDEPENDENT BANKERS ASSOCIATION OF AMERICA

Mr. MACDONALD. Mr. Chairman, Mr. Roemer, I am testifying today on behalf of the Independent Bankers Association of America, which represents approximately 7,200 small- and medium-sized commercial banks located in smaller towns and suburban communities across the United States.

Our member banks make the major share of their commercial loans to small business and agriculture.

We have been before this subcommittee to testify about the effects of banking deregulation on small business three times before. As you know, small business and small banks are tied together as if by an umbilical cord.

You have seen studies which show that roughly three-quarters of all loans to small business are made by small- and medium-sized banks; 97 percent of the commercial loan portfolios at banks with less than $100 million in assets, and 77 percent of such loans at

banks with between $100 million and $1 billion in assets, are small business loans.

In contrast, banks of more than $1 billion in assets make only 13 percent of their commercial loans to small business. You are also familiar with the attitudinal surveys conducted by the SBA and the National Federation of Independent Business, which indicate that small firms prefer to deal with small banks which know them and their business personally. These facts are well established.

Perhaps the greatest single threat to maintaining this lifeline of financing for small business is the spread of so-called nonbank banks, most of which are chartered to take deposits but may not make commercial loans.

To date, nearly 75 such institutions are operating or have been approved, and more than 300 charter applications are pending. Few of these would make commercial loans. Whatever deposits they collect will be removed from the local community's pool of money available for loans to business.

It is not surprising, therefore, that the NFIB, the National Small Business Association, and the Small Business Legislative Council have supported closing the nonbank bank loophole.

The recent Small Business National Issues Conference took the position that "Congress should act immediately to close the nonbank bank loophole," which it was felt "has the potential of seriously interrupting the flow of debt financing available to small business."

Legislation that would close the nonbank bank loophole has passed both the House and Senate Banking Committees and must be brought to the floor this month. If no legislation passes, the Comptroller of the Currency has threatened to approve all of the pending nonbank bank charter applications after Congress adjourns in October.

We strongly urge the members of this committee to do everything in your powers to see that legislation is brought to the floor and then passed.

In previous testimony before this subcommittee, we noted that deregulation has confronted banks with greater uncertainty in the cost of funds and all but eliminated the ability of banks to make long-term, fixed rate loans.

I am happy today to point to several developments which may increase the availability of such loans. The President has signed into law a bill which authorizes the pooling of SBA guaranteed loans for resale on the secondary market.

IBAA supported this legislation because we believe that an expanded secondary market will help banks to make more long-term loans. We urge this committee to monitor the way in which this new program is implemented by the SBA and to assure that independent banks have an equal opportunity to participate in it.

Also worth noting is an innovative program initiated by the Allegheny County Pension Fund designed to make long-term, fixed-rate loans for plant and equipment available to small businesses in the county.

The pension fund has committed to place matching certificates of deposit, up to $1 million total, in a selected community bank as it

makes fixed-rate loans of between 5 and 10 years to small local firms.

This program is noteworthy because it uses a bank as the intermediary to channel a small part of the vast sums which are invested by pension funds in this country into individual small businesses. Community banks are ideal intermediaries because they are so closely involved with small business financing.

In the absence of major banking legislation during the past 2 years, the principal thrust of deregulation has come from the regulatory agencies, sometimes in ways that run counter to the intent of Congress.

In regard to the actual supervision of banks by the regulatory agencies, several recent developments and proposed reforms that have been wrapped in the cloak of deregulation may cause serious problems for small banks, and in turn small business.

The most obvious and potentially damaging example is the FDIC's attempt to increase market discipline among depositors and creditors by employing the so-called modified payoff plan for smaller bank failures and increasing financial disclosure requirements, while at the same time insuring all deposits, including foreign deposits, for Continental Illinois.

The clear message of these regulatory actions, one that has been trumpeted throughout the national media, is that your money is safer in large banks than in small depository institutions.

The FDIC has admitted that this double standard exists and claims that it is trying to rectify the situation. In the meantime, depositors of more than $100,000 are more likely to place funds in money center and larger regional banks, channeling money away from local markets that serve community businesses.

In the months before Continental Illinois' failure, and in several succeeding cases, the FDIC used a new payoff system in which depositors of more than $100,000 at smaller banks were paid some percentage of the uninsured amount and issued a certificate of receivership for the rest.

The idea was to get large depositors to scrutinize more carefully the banks in which they place their money. The FDIC has also proposed a new policy of encouraging depositors to seek information on enforcement actions and insider loans before placing their money in a bank.

However, the action taken to prevent Continental Illinois' failure served to verify the commonly held suspicion that big banks would not be allowed to fail. Market discipline under this system would only work for smaller banks, driving deposits to money center institutions.

Another proposal by the FDIC to bring more market discipline to banking would have banks pay deposit insurance premiums based on their riskiness. This is a concept the IBAA supports, but with the important caveat that such an approach be "properly structured and administered." At the present time, premiums are ostensibly the same for all banks regardless of risk. This approach is unfair and actually encourages risky behavior on the part of certain banks. However, there is an even greater inequity in the system because certain foreign deposits are excluded from the as-

sessment base and it is largely the money center banks which carry such deposits.

Foreign deposits totaled $347 billion as of March 1984, roughly one-fifth of all U.S. bank deposits, but almost 40 percent of money center deposits. Senator Proxmire has stated that Continental Illinois' reliance upon foreign deposits cut its annual premium by $14 million.

The upshot is that large banks aren't paying their fair share into the insurance fund, yet Continental was able to tap $4.5 billion from the fund for assistance. Senator Proxmire has offered an amendment to the Garn bill to end this glaring inequity, and we urge members of this committee to support it as a part of the total legislative package.

To get back to the subject of risk as related to insurance premiums, our concern is that the regulators might tend to associate smallness, both in bank size and in size of commercial loans, with riskiness, as has sometimes been the case in the past.

The regulators' insistence until recently upon higher capital standards for smaller banks is the most obvious example of this bias. Yet, the Comptroller incredibly allowed Continental Illinois to declare dividends for the first quarter of 1984 despite its condition, which had been deteriorating since Penn Square failed in 1982.

In fact, the Continental failure should dispel the perception in many quarters that bigness in banks means soundness. Our members in Oklahoma and Texas were appalled at the willingness of Continental Illinois, Chase, Seattle First and other large banks to gobble up Penn Square's loans, in sharp contrast to the general absence of such participation by banks in Oklahoma and Texas, traditionally those with the most experience and expertise in energy lending.

The Wall Street Journal of August 8 carried an article discussing First Chicago's sale of a package of 12 bad loans to an investment banker for $42 million. The article noted a deep discount on this package, citing one loan with a face value of $40 million, only $2 million less than the entire purchase price.

Apparently there is a growing market for bad loans among investment bankers, who turn such packages into "junk bonds." There must be a sizable enough market to draw the likes of Drexel Burnham Lambert and Bass Brothers Enterprises, but it is not coming from community banks.

Let me talk briefly about my bank's experience in lending to small business and the riskiness of such loans. Because of its geographic location near the Syracuse suburbs, State Bank of Chittenango's business is largely consumer oriented.

Nonetheless, over the past 5 years, on average, just over 30 percent of our loans outstanding have been made to small businesses.

Such loans, as a percent of total outstandings, increased steadily during the period from a low of 27.5 percent at yearend 1979 to a high of 37.5 percent at yearend 1983.

Small business loans are, therefore, clearly becoming a much more important part of our portfolio.

The same period saw regulatory authorities placing more and more emphasis on the commercial loan portfolio in the examining process.

Consider these statistics for that 5-year period: By dollar amount, small business loans averaged 29.2 percent of all outstandings, but accounted for 90.6 percent of all loans classified by examiners. The examiners classified small business loans at a rate 3.5 times the dollar amount of those loans past due according to the terms of the loan.

Net losses in this category of loans amounted to 36 cents per $100 of average outstandings, or roughly one-third of 1 percent. A startling contrast emerges when the 1979–81 period is compared to the 1982–83 segment. Small business loans accounted for 25.7 percent of total loans from 1979 through 1981.

Of all classifications 86.3 percent were small business loans. The examiners classified small business loans slightly over twice the dollar amount of past dues and we lost 54 cents per $100 of outstandings, roughly 0.5 percent.

In 1982–83, such loans rose to 34.4 percent of the total portfolio and accounted for 93.7 percent of total classifications. The examiners classified small business loans at nearly six times the amount of past dues; yet we lost only 17 cents per $100 of outstandings in those 2 years, less than 0.25 percent.

There is something incongruous about that. Now, I am not saying the examiners were necessarily wrong to emphasize those loans. Maybe we did a better job because they hammered on them. What I would like to know is, "What were they saying to the management of Continental Illinois and Seafirst and Chase at that time?"

Perhaps there is a conclusion to be drawn here. Maybe small banks have a better handle on their business customers than larger banks. Maybe we know our customers better. Maybe making loans on the basis of what is known about the character of the business manager is better than making loans on the basis of what is contained in financial statements.

Maybe for small business, small is better than big in the banking industry. Maybe remote management fails because it is remote, and local management succeeds because it is on the scene. The personal knowledge executives of small banks have of their customers also affords an ability to assess the pros and cons of a decision to ride out a storm or foreclose on a troubled debtor. In cases such as those currently faced by many of our farm belt banks, it seems to me that examiners should give more weight to the opinion of the banker before insisting on a chargeoff or urgently recommending forced sale of collateral. Those lenders are surely entitled to at least as much in the way of forbearance as are lenders with nonperforming loans to foreign nations.

Let me also touch briefly on the subject of antitrust laws and the concentration in banking that may be brought on by deregulation. A researcher at the Fed recently did a computer simulation of the concentration among banks that would be allowed under current antitrust guidelines if geographic restrictions were to be removed. The results, presented before the House Banking Committee in May, were rather incredible. According to the testimony, Justice Department guidelines would allow dramatically increased levels of concentration in virtually every one of the 318 SMSA banking markets in the country.

Banking organizations in these areas could be reduced from 6,585 to 1,801, reducing the average number of banks in an SMSA from 20.7 to 5.7. Mergers would be allowed to the point where every metropolitan banking market in the country would be highly concentrated.

The author of this study ventured the opinion that this type of merger concentration was unlikely to occur, but it certainly dramatizes the fact that existing antitrust laws will have very little effect as geographic boundaries break down. Regrettably, none of the legislation pending in Congress addresses the antitrust question. We feel strongly that any further geographic deregulation will need to be accompanied by revised antitrust standards for banking.

Mr. Chairman, that concludes my prepared statement. Again, we urge members of the subcommittee to do whatever can be done to move banking legislation before Congress adjourns. We believe that doing so is in the interest of small business. I would be pleased to respond to any questions from members of the subcommittee.

Mr. NOWAK. Thank you very much.

We have, of course, a member of the Banking Committee sitting with us today, Mr. Roemer, who is going to take heed of everything that is said.

Let me ask a question that I asked our other witness. Do you have, as an organization, any type of figures regarding uninsured money, over $100,000, moving to other banks or being spread out or taken to the large money center banks for deposits?

Mr. MACDONALD. We see a lot of evidence that people have a growing concern about that. In our particular area, we don't have a large number of depositors with that kind of money in the bank.

There are a few. The State Bank of Chittenango is fortunate in that we have been preaching since the earliest days of money market certificates, we have been preaching safety and soundness over all that time and saying, we would rather go broke, being safe and sound having our money flow out to other banks, than paying too much and not being able to make a profit on the deposits we have, but we do see a concern building on the part of many of our customers.

I suspect that some money has flowed out because of the Penn Square, Continental Illinois situation. I don't think that we have any hard statistics available. IBAA will be glad to survey its member and present the committee with some information.

Mr. NOWAK. I would request that when you get back, see if throughout your system there is a flow to the money market funds of some $238 billion. That is at least $178 billion that would have been somehow worked into the depository scheme and available for lending?

Mr. MACDONALD. Correct.

Mr. NOWAK. Even if it is recycled back, it doesn't have the same effect in the communities where the money came from, I would suspect.

Let me turn to Mr. Roemer, because he has a seat on the Banking Committee, and has been very active in this area.

Mr. ROEMER. Thank you, Mr. Chairman.

Turning to the legislative options that face the Congress now, you referred to the Garn committee on the Senate side, and the

Banking Committee on the House side both having passed a piece of legislation designed to close the nonbank bank differential. I guess if you are at a crossroads here, the choices are two. If you think the banking system is threatened, you either increase the power of the banks, or you decrease outside competition toward the banks.

Do you have a preference? Do you have an inclination as to which way to travel in the best interest of the banking system, or am I making it too simple? Is it a hybrid combination of them both?

Mr. MACDONALD. I am not speaking for IBAA now, but for Bob MacDonald, I would like to see a bank be a bank. I don't really think that that is possible. Consumers have learned that they can get more than 5.5 percent for their money.

Unfortunately, Merrill Lynch got its foot in the door in the first place, and I think that that should not have been allowed to happen, but it did.

The solution now, I am personally concerned with those types of institutions, that they don't keep any reserves. I am afraid the Fed is going to lose control of the money supply. If that happens, we are going to be in very desperate straits.

Mr. ROEMER. Some say they already have.

Mr. MACDONALD. I come from New York, Mr. Roemer. We have to remember that New York has recently passed some legislation which would permit banks to get into the insurance business and several other things. IBAA and we believe strongly in States' rights. We don't plan to export them in the fashion of SD.

I think that the bank's ability to get into some closely related businesses make a lot of sense. I think that banks can offer certain services safely. For instance, insurance brokerage, I think, is a safe service. That is fee income as opposed to underwriting. Well, who wants to get into a lost business, anyway?

I think that banks can deliver that service less expensively. I heard your concerns about what some people in New York called coercion when I testified before the DeWin Commission. There are a number of banks across the country, small banks that have been in the insurance business for years. Our bank could have been, if it wanted to be before this. You expressed concern about high interest rates. One way to help get those down a little bit is to permit banks to get some alternative sources of income.

I think that the coercion problem is, I know it is of some concern to some folks, but the concern is unfounded. I would look pretty funny if I said well, I will make you a loan if you buy your insurance from me, when you can go down the street and get it from another bank. Moreover, our bread and butter is the income from that loan.

A small amount that a bank would make on the insurance premium just does not compare to that.

One other problem that I see with that is you can get an awful lot of ill will from that type of pressure on a customer. They talk to each other, and I think we would lose an awful lot more business than we ever gained by selling out a little insurance policy.

Mr. ROEMER. You and Mr. McCall agree, it seems to me, that at least in part, that banks should enjoy additional powers to be competitive. I wonder if you agree all of the way.

Mr. McCall says, and it makes a lot of sense in his testimony, the best way for individuals within the marketplace to seek their respective niches and levels is to let them make that decision, not regulation which by its very construction has to be generalized and blanketed, but free the marketplace up and let the individuals and entities seek their own level, and that will increase competition, increase the choices of individuals.

Do you agree with that? Would you have any restriction? Mr. McCall, he is here, so I am not putting words in his mouth, he took it to its logical conclusion in that he personally thinks we ought to deregulate the banking industry, and he gave very few, if any, exceptions to that.

Do you share that opinion?

Mr. MACDONALD. I think Sears, Roebuck ought to sell stocks and we ought to do the other stuff. I do not believe in that degree of deregulation. I think that banks ought to be able to get into businesses that make sense, that are fairly closely related.

Mr. ROEMER. Do you think banks ought to expand their powers when it is profitable? You said who wants to get into the brokerage business. You are only for expansion of powers if you make money at it?

Mr. MACDONALD. That is right.

Mr. ROEMER. You are just putting one exception on it, as long as it is profitable?

Mr. MACDONALD. I said it ought to be closely related to the banking business, and I think insurance and stocks and bond sales, that sort of thing, is closely related. I do not think selling socks is closely related to the banking business, and we should not be in that business.

There should be some restrictions on what banks can do. Banks are special in our society. That was recognized a long time ago. You know that. You are a former banker.

We have a special mandate to keep the funds of our community safe and to reinvest them in our community.

Mr. ROEMER. Well, in the early 1930's, because of the high rate of bank failure, it was ascertained that banks failed not because of their banking indecision or errors, but because of speculation in near-banking, but nonbanking areas such as insurance, securities, and real estate.

That is why Glass-Steagall was put on the books. You have an historically different view of Glass-Steagall that you have stated here today. You said banks are special, and ought to be regulated.

You are very flimsy, very sketchy on how you want to regulate them. You would let banks get into securities and real estate, because it is somehow related to loans you are already making.

Where would you draw the line, socks? That is it?

Mr. MACDONALD. We will put all hard goods in with socks. I do not frankly think that in my opinion the underwriting of insurance or that sort of thing is something that banks ought to be in. That is a specialized field. We have no business in it.

The fee-based stuff and people doing their financial transactions under one roof, financially related business is what I am talking about, Sears, Roebuck is doing that with Coldwell Banker and All State, and their new deposit-taking activities and that sort of thing, Merrill Lynch is doing that.

Mr. ROEMER. Right, I agree. Let's pick on Sears, Roebuck for 1 second.

Mr. MACDONALD. Good idea.

Mr. ROEMER. I knew you would like that. It seems that Sears is the epitome of what you espouse. I mean, Sears has done exactly what you suggest a progressive small bank should do, that is amass an accumulation of financial services that you could offer to your customers.

That is exactly what Sears has tried to do. They took a loophole in the law and pushed it to its logical conclusion. That is our fault, not theirs.

Since you have brought up Sears and claim to be different from Mr. McCall in terms of regulation, you come out exactly the same place that Sears does. You just don't want to compete with them. You want to offer the same services they do, but not compete with them.

Mr. MACDONALD. I disagree with that, Mr. Roemer. The reason I think we ought to be permitted to do it, as I said was, I would like a bank to be a bank to be a bank, but that is not really feasible any more, because I don't think that you fine gentlemen in Congress are going to push Sears, Roebuck out of our business.

Because they are in it, we ought to be able to compete with them in those financially related service areas. Fair is fair in this whole thing, and that is why I am for that.

I also think that the consumer is going to benefit from certain expanded powers for banks.

Mr. ROEMER. We have other witnesses, and you have been awfully generous with your time. I will close by saying, I appreciate your testimony. I will reread it. It is either a lot more than it first seems, or a lot less, but I will read it carefully.

I know that you care about the system, and I give you an A-plus for that. I do, too. I wonder what kind of direction you would give us as legislators?

One of the most perceptive things that you said was that the deregulation move now comes from the regulators. There has got to be a reason for that. Maybe they know how unfair and unjust the regulations are.

Mr. MACDONALD. I think that is true. Could I bring up another point, Mr. Roemer, that you hit on a while ago? You said that you had an interest in what banks are charging their business customers.

We have developed in the State Bank of Chittenango what we hope is the beginning of a system that will gear what the customer pays to what our costs are, and we have a base rate that we are tying most of our small business loans to rather than the prime.

We don't think that the New York prime has anything to do with our State bank, but what we are paying for money does. Some of the testimony that Mr. McCall made indicated that he shares this concern, also. Our customers are paying what amounts to

about 1 percent above prime now, but that is an accident, because we have taken the weighted average cost of our high cost money; that is, CD's, money market, super NOW accounts, that sort of thing. We are tying our rate off that and it moves once a month, and the prime rate doesn't affect it at all.

Mr. ROEMER. How has the marketplace reacted to your radical pricing system? Are they copying you or ignoring you?

Mr. MCCALL. Our customers seem to like it, because we pointed out, back in early 1981, when prime was 21.5, our customers wouldn't have paid more than 17.5. Maybe they are paying a little more than they would have been a couple of months ago when the rates were falling, but the range would have been a whole lot narrower, and they like that.

Mr. ROEMER. Thank you.

Mr. NOWAK. I am trying to get a figure for the reserve. Do either of you gentlemen know what the reserve is up to now?

Mr. MCCALL. What our fund is up to?

Mr. NOWAK. Yes, that which would be available for another Continental.

Mr. MCCALL. Prior to Continental, the deposit insurance fund was in excess of $16 billion, in excess of that amount, sir.

Mr. NOWAK. If we had four Continentals coming at us, or the equivalent thereof, or a foreign loan that something had to be done with, what other source would there be?

Mr. MCCALL. We can go to the Treasury for additional funds.

Mr. NOWAK. You would just have a loan against the U.S. Government?

Mr. MCCALL. Yes.

Mr. NOWAK. We could go on adding to the deficit, which would affect the interest rate. It just seems to me that there are so many problems that have been suggested. Many of us have seen the Washington Post article of September 2, talking about the Financial Corp. of America. They make the statement that many experts believe the industry needs supervision because of deregulation. As the other services that you were mentioning come in, the bank would have to have more supervision to see that there is no spillover back to the bank.

The bank may not be sound, or a brokerage house may have a problem that may spill over into the bank. How do we keep those as separate entities, and so forth?

One banker told me that because of all this deregulation, they are hiring people all over the place. These people were experts in the industries, and when they came into the bank to head the new service department, they were having a terrible time trying to get established. Costs are rising in trying to compete with Merrill Lynch or others that are in the brokerage or the insurance businesses. It will take some time and a lot more supervision if we are going to look at faster deregulation.

Something secure would have to be set up in the Federal Reserve System to provide the kind of stability that everybody is a little anxious about. Every time we pick up the papers and read about the foreign loans which, I don't know who has a handle on, the indications are that we are loaning money to pay interest and extending the loans. There will be a bigger problem somewhere down

the line about how that fits into our own deficit situation and how much borrowing is out there.

It starts to get troubling, and you can see why some members are worried now. Let's expand product deregulation, while all of this is in the system. I agree with you, maybe it would have been advisable for this Congress to do something when the so-called money market fund started.

Unfortunately, I don't think there was a great hue and cry from the banking system to alert anybody here. At least there wasn't a wholesale kind of a push as there was when the Congressmen and Senators were made very acutely aware by the banking community of the deduction on the interest. Our friend Senator Dole had several things to say about that to the national bankers. In any event, there is an awful lot of thought going into this, and your testimony gives us more to put into the whole conversation as we try to fashion something that makes sense.

Everything seems to say that deregulation is the way to go. Yet, I am hearing from others within the banking community that maybe there should be some brakes. I am not talking about small community banks.

Mr. MACDONALD. I don't think I used the word "total" in my comments.

Mr. NOWAK. No; I am saying both from yourself and from others, there has to be some pause period, so to speak.

Mr. MACDONALD. I think that the safety of the banking system is paramount. I serve on the Federal legislation committee and we met here in May and we concluded that while we would like to have some more powers, and we are talking about fee-based powers here, I would like to make that point, in which there is little or no risk. That is what I would emphasize, but we concluded, closing the nonbank bank loophole, that was a major thrust. We would like to have the others.

Mr. NOWAK. Let me ask both of you gentlemen this question: Where are the 700 banks that we talk about in terms of trouble that have been listed? Give us some brief description as to their financial situation, or what is anticipated from them?

Mr. MCCALL. The 750-odd problem banks are obviously spread all over the country. There are in certain States higher concentrations.

Mr. NOWAK. Is this a published list?

Mr. MCCALL. No, sir, not at all.

Mr. NOWAK. When you talk about the 750, I assume that people are still depositing money in those. Are these the traditional internal kind of audits that are performed, or have they always been listed as such? Is this new in the review process?

Mr. MCCALL. Maintaining a problem list, per se?

Mr. NOWAK. Yes.

Mr. MCCALL. No, we have always had that. It has grown considerably over the past several years.

Mr. NOWAK. Take us back 10 or 5 years.

Mr. MCCALL. A year and a half ago, there were roughly half that number. A year prior to that, which would have been December 1981, there were roughly 220 problem banks, and that would probably have been much closer to the norm through or from that

period of 1974 through 1981, and it would have been in that 150 to 200 range.

Mr. NOWAK. I would assume that a few of these are your member banks, too, is that correct?

Mr. MACDONALD. I presume that we have some member banks that are in a little trouble, yes, and I think it is mainly because of the economy, because the costs of our operation, the liability side of our balance sheet has been pretty much brought to a deregulated environment, but we still have those long-term fixed rate loans on the other side.

Until those run off, we are going to have problems. Moreover, some of our Farm Belt bankers have got some real problems, because things happened in the Farm Belt that didn't go the right way.

We are concerned about that. We can't do much about that. We are concerned about the deficit. Just as Mr. McCall indicated, that does have an effect on interest rates. On the other side of it, I agree with Mr. Roemer, we may be a long time getting rates down, because I think that a floor of high rates has been built, and is being built that extends out over anywhere from 6 months to 3, 4, or 5 years with these long-term fixed rate deposits that are on the books, and at some fairly high levels.

It is going to take a while to work those down, and the banks have got to make a spread off of that. That is what we are doing at State bank.

Mr. NOWAK. There was a little question when the rates were allowed to rise to the numbers that they were, and still are, as to how long do we want to keep inflation at these rates?

Mr. MACDONALD. The problem is that, savers used to subsidize borrowers. That doesn't happen any more. Now we have two classes of consumer out there. The saver, who wants the highest rate, and the other is the borrower, who wants the lowest rate he can get, and the two don't seem to mix.

Mr. NOWAK. That was my point. When is the cost of money going to come down so you can lower the rate your borrow at?

Mr. MACDONALD. When the demand for money is not greater than the supply. Money is like apples, when you have three apples and 10 people that want them, you get a big price for the apples. When you have 10 apples and only two people that want them, you get a little price for them.

Mr. ROEMER. No doubt about that.

Mr. MACDONALD. We are going to have a bigger demand because the infrastructure of this country is a problem.

Mr. ROEMER. I get nervous, I ran for Congress in 1980, the slogan, "Vote for Roemer, he will help balance the budget." When I came it was $60 billion, it is $175 billion now. I am doing a hell of a job.

Mr. MACDONALD. I sympathize with you. I know you have a problem. You can't cure it all by yourself.

Mr. NOWAK. I think he is working on it. We have a live quorum at this point.

I thank you again for your testimony. The questioning, too, is helpful. We will probably develop other questions as we bring all of this testimony together and try to make some sense of the total

package. It is all from different points of view and yet I feel there is a string of common thought going through here. We will keep the record open, and we may get back to you for some further written questions. We thank you very much for coming at this point.

Mr. MACDONALD. Thank you. We appreciate the opportunity to come here and we will be glad to try to answer more of your questions and try to get that information you asked for.

Mr. NOWAK. We will be back in about 10 minutes.

[A short recess was taken.]

Mr. NOWAK. The subcommittee will be back in order.

Our next witness will be Professor Pettit: If you will come forward, we first of all would like to thank you for your testimony. Your statement will be incorporated in total. I just would like to mention that Professor Pettit of the University of Houston, has received his Ph.D. in finance at UCLA and had previous teaching positions at the University of Pennsylvania, and Purdue. He also authored a two-volume series entitled, "The Sources of Financing for Small Business." We appreciate your willingness to come here today to give us your insight into the problem from a totally objective point of view.

Please feel free to go ahead.

TESTIMONY OF R. RICHARDSON PETTIT, DUNCAN PROFESSOR OF FINANCE, UNIVERSITY OF HOUSTON

Mr. PETTIT. Thank you very much.

I like to think I come at it from an unbiased point of view. I will concentrate my comments on structural changes which will likely affect the nature, cost, and level of debt financing available to small business.

The structural changes I am referring to include less specialization by financial institutions, more geographic and product diversification, leading to some consolidation of institutions into larger sized, multiofficed institutions, and less constraining usury laws. Future possible structural changes include the generation of equal reserve and capital requirements on the part of all banks—large and small banks—and the possibility of tying deposit interest rates to the banks' risk.

These changes, no doubt, will affect small business. I don't happen to believe that they will affect them so much in terms of whether or not credit is available, or its cost, but who the competitors are, how they behave and what it will take to allow small businesses to establish lending arrangements.

I happen to believe that both small businesses and small banks are profitable and resilient organizations that will continue to play a major role in the economy. I also believe there is at least some possibility that these organizations will be made better off with deregulation.

Let me devote a bit of attention to a number of issues that relate directly to the effects of deregulation. The first has to do with the possibility that deregulation would lead to a series of large, multioffice organizations and the effect of this on the lending process.

If—and let me stress that I am saying—not because large banks come to dominate some lending markets, you can expect the following to take place:

There would be a small increase in efficiency of the lending process and, because of this, somewhat lower costs for lending in general. This will occur because of what I view as being an increasing level of competition in local banking markets, and because of the possibilities of economies of scale being generated in some parts of the banks' operations.

In addition, there will be a considerable impersonalization of the lending process, but this may not involve any loss of funds to the small business sector. The depersonalization of the lending process is likely to have a couple of effects.

First, banks will be called upon to take a closer look at the relative risks and returns of loans to different small businesses. Attempts will be made to systematize the process of collecting information and analyzing the loan decision.

Some small businesses that received credit in the past may no longer receive credit with this different method of analysis. On the other hand, this impersonalization may improve the chances for new organizations or organizations that had not received credit in the past, having a better chance at receiving credit.

The personalization of the lending process in the local community that seems to exist to a certain extent now is fine, but with a limited amount of funds available, that also means that other businesses have not received financing. I am not sure we shouldn't worry about those businesses that did not receive financing from the existing structure.

The second issue has to do with risk. I don't believe that small businesses are inherently more risky than large businesses. I do think that small businesses have less of a capacity to deliver appropriate information to bankers or other possible lenders regarding their risk levels. I think small businesses are at something of a disadvantage in the marketplace by being unable to deliver audited financial statements for example, or relatively more sophisticated financial planning models that large businesses clearly have an ability to offer to potential bankers.

Thus, I think small businesses may be perceived as being more risky, when actually they are not. I have also indicated that I don't think banks and savings and loan associations are particularly good at risk assessment. In the past they have been limited in the types of markets they can get into. They don't have the experiences the Merrill Lynches of the world have in identifying risks associated with certain types of activities, and this plays to some extent on small businesses' ability to obtain credit.

The way to overcome this problem is not to maintain or create regulations, but rather, to elicit trade organizations or governmental agencies in the process of informing small businesses of the bank's informational requirements. In other words, you teach small businesses, small business executives, how to deal with banks who are concerned about understanding the risks that are associated with business opportunities.

Briefly, the third issue I would like to speak to has to do with competition. My view is that deregulation, as it has proceeded thus far, has resulted in substantial benefits to the consumer saver.

Brokerage firms, insurance companies, and other nonbank intermediaries have entered the consumer deposit market, resulting in substantial benefits to the saver. I believe they would begin to enter the business loan market as well, with the possible result of substantial benefits to the business loan sector.

I see absolutely no reason why firms like Prudential Insurance Co., for example, would not open lending offices if they were in fact permitted to do so. Anything which appears to be profitable on the financial side is something that they have attempted to get into in the past. Since I view small business lending as potentially profitable, I see no reason why they would exclude themselves from that market.

This is very important. While I doubt it would be the case, if it turns out that these large super banks that may be generated would leave the small loan market, there would be other financial organizations that would be able to step in and fill the gap. They would do so in a way that would not result in any large or measurable increase in costs of financing to business organizations or to the amount of that financing which is available.

In sum, I think that deregulation is not likely to substantially affect either the cost or volume of small business lending, though it may turn out the structure of the industry that engaged in this lending is substantially different. The market is likely to be made up of a broader range of firms, but it is one that will not result in any increased costs of financing.

There are some things that can be done to make the transition to this new environment on the part of small businesses easier. I have indicated in my prepared statement some ways in which this transition could be made easier for small businesses, and the nature of those suggestions revolves around attempts to help the development of standardized loan contracts, and the development of small business executive expertise so that they are able to deal with financial issues and with financial institutions.

I have one final point that I would like to make that also is included in my prepared statement. That has to do with interest rates and inflation. There has been a tendency on the part of all of us to not properly represent what goes on in the lending process in any inflationary environment.

If you would not object to a 3-percent interest rate with no inflation, then because taxes are paid on nominal interest earned, not real interest income, it would take a 20-percent interest rate with a 10-percent inflation rate to permit the lender the same real return on the money being used.

Thinking in terms of after tax and after inflation returns to the banking community, based on the CPI and the prime rate, interest rates over the past 10 years have been rather low. Granted, they have increased in the last 3 or 4 years as inflation has moderated, but on an after tax basis, you get a somewhat different view of how expensive it was to borrow in past years than seems to come out in much of the prior testimony that has been delivered.

If in inflationary environments small businesses suffer, it may be that those small businesses that face lower income tax rates suffer the most, and therefore, you might find small businesses objecting to the real cost of financing because they don't get the full tax credit if they pay taxes at a lower rate.

It turns out that the beneficiary of this tax system, during an inflationary period, is not the banks, though, since the banks' tax rate doesn't change. Rather, the Federal Treasury, which would find their revenues increasing during that inflationary period as a result of the increases in the level of interest rates, is the beneficiary.

Thank you. I would be happy to answer your questions.

[Mr. Pettit's prepared statement follows:]

PREPARED STATEMENT OF R. RICHARDSON PETTIT, DUNCAN PROFESSOR OF FINANCE, UNIVERSITY OF HOUSTON

With Paul Horvitz I recently published a two-volume set of studies undertaken to determine the problems that are associated with the financing of small business organizations. These studies reflected the inputs of some twenty-five other experts in academia, as well as the research departments of a number of federal agencies. The study was originally done under the auspices and with the financial aid of the Small Business Administration, but was published independently of the SBA this year. To a large extent my comments here will reflect the knowledge that we have gained as a result of this investigation. While the investigation itself was much broader than those issues that I believe you are presently concerned with, it does address some of those issues that relate directly to the impact of deregulation of the financial service industry and the effect of that deregulation on the ability of small firms to attain adequate financing.[1]

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[1]There is little direct evidence that can be brought to bear in addressing questions that relate to small business financing. This is not only due to the dearth of information on the operations of small businesses and the manner in which they finance their operations, but also because in the data that are available there are so many other confounding influences that can affect any given relationship. Any financing arrangement that supplies small businesses with funds for their operations is the culmination of the demand for funds by that small business, and the supply of funds by financial institutions or other investors. Thus, the interest rate and the amount of funds borrowed by small businesses collectively reflects the interaction of the demand for funds and the supply of funds. Observing individual transactions does not give us any indication of the supply curve itself. That is, we do not know whether interest rates, or the demand by large borrowers, or changes in rules and regulations have much of an effect on willingness of suppliers to continue to offer funds to any particular segment of the loan

I would like to preface my remarks with a comment about loanable funds (money) that is among the most universally accepted concepts by those of us who spend our lives attempting to study finance and financial markets. The concept is that money is the most fungible of all commodities. It can be easily and costlessly moved from one employment to another to take advantage of any profit differential that may exist between those opportunities. Regulations, regardless of their intent, often have little impact upon the allocation of money. Money will flow to the highest (risk adjusted) return, regardless of what regulations might say about the desirability of that particular avenue. It is for this reason that we have always thought that loan markets are relatively efficient. That is, loan markets would adequately fund those in need of money as long as they were willing to pay a price that reflects the competitive pressures of the market place. It is particularly important to keep this in mind when looking at issues associated with financial market deregulation. Because of the fungibility of money, the elimination of one lender in one part of the market does not mean that there will be an absence of all kinds of lenders in that particular market. Specific examples of what I mean will be made in my comments as they pertain to structural changes in the financial sector that occur as a result of financial deregulation.

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market. It is exceptionally difficult to try to make any estimates of the extent to which the supply of funds to small businesses changes as we change any other item in the economy. We simply do not have enough sample points, holding other things constant, to be able to estimate this relationship. Yet, it is this relationship which you are asked to address and, perhaps, to alter through legislation and regulation. This makes for a very difficult problem, and one which must in part, as you can tell by my comments, be addressed on a conceptual level and not solely on an empirical, or observation by observation level.

Structural Changes

There are a number of structural changes that have and are continuing to occur as a result of deregulation that has taken place in past years. There has been a growth of bank size and a concommitant expansion of banks to multi-office, geographically diversified organizations. This has reduced the number of banks operating in the United States somewhat, though the number of banks operating in the country is extremely large when compared with most other industries--even retail industries. A second structural change that has taken place recently, and at a rather rapid pace, is the diversification of the financial industry into new lines of business. Traditionally single product firms have become multiple product firms offering services that they had no experience with in earlier times. The best characterization of this is that banks and savings and loan associations now offer broader lending, deposit, and brokerage services and, of course, other financial service firms such as brokerage houses have jumped into the traditional market for savings deposits (in the form of money market funds). As product diversification has taken place, all financial service firms have faced increased competition. The third structural change that has had a substantial impact, though it has been covered up by other changes, is the decline in the importance of usury laws and the absence of effective usury ceilings. In the past these ceilings have tended to disrupt loan markets, making it impossible for certain types of borrowers to receive adequate credit (small businesses among them). There are other potential structural changes that may occur in future years. At this time, the most talked about, if not the most likely, is the possibility of deposit insurance charges that are based upon examiners' perceptions of the risk of the depository institution's portfolio of loans. Another potential change relates to reserve requirements on financial institutions that are

equal among all institutions or are based on risk, but are not a function of the absolute size of the organization. I think the possibility of this change taking place has been enhanced markedly in the past two years through the inept lending practices of large institutions like Seafirst and Continental-Illinois.

The Impact of Structural Changes on Small Business Financing

There is no doubt that some of the structural changes mentioned above, which were brought about by changes in regulations, will pose problems for small businesses and their ability to acquire adequate financing. I would like to offer some comments on a number of issues that I consider to be of particular concern, and to attempt to offer a measure of the potential affect of the structural change on small business financing.

I would like to point out that I hold no particular bias toward or against small businesses. It seems to me that in certain business activities small firms may be more adept at production than large firms. In other business activities there may be economies of scale sufficient to give large firms a particular advantage. Moreover, I hold no kin to either large or small banks. In some markets it seems apparent that large banks have certain economies of scale that reduce the costs of operations and improve the efficiency of the entire system. In other markets smaller banks might be more adept at the deposit taking and lending process. My general attitude is that as long as the market in which these firms operate is generally open and free to competition, small firms will exist when it is efficient for them to be small, and large firms will exist when efficiency demands a larger type of organization. Seafirst and Continental Illinois blundered as large organizations, and a number of small banks have been forced to merge or declare bankruptcy.

Multi-Office Banking and the Lending Process

The expansion of services with deregulation will probably lead to an increase in the general size of banking organizations. Indeed, it may be that there would be a series of super banks that would tend to dominate the markets for many of the services currently offered by banking organizations. Small businesses have been characterized as fearing greatly the potential impersonalization that would come from dealing with such large organizations. They may have a lending office staffed by people not familiar with the local economy or local businesses that need financing. One of the studies that was conducted that I referred to earlier (by Bernard Shull) was based on indepth examinations of a limited number of banks and suggested the following:

1. Both large and small banks seem to distinguish between "upper" and "lower" level small businesses. Lower level small businesses are characterized as those with revenues limited to less than $2 million. It was apparent in his examinations that these types of businesses were perceived by banks of both sizes as less favorable clients than the upper level small businesses that were somewhat larger in size. The discrimination against loans to lower level types of small business had to do with the cost of lending and with the perception that there was a higher level of risk associated with these firms.
2. There did not seem to be any difference in the attention paid to local credit demands by either the small local banks or by the office of a large, multiple office bank located in the local area. In particular, small businesses that were in the upper level category were viewed as being among the most desirable and profitable of all customers.

3. Large banks did appear to be more technical and impersonal, but large banks appeared to be more willing to make loans to new business borrowers and existing lower level (or more risky) small business borrowers.
4. Large banks seem to have a broader array of loan contracts available to small business. Small banks offered a smaller variety of types of credit to desirable small business borrowers.
5. Large banking organizations appeared to emphasize secured lending.
6. Large multi-office banks were more retail oriented and seemed to substitute to some degree consumer loans for business loans. That is, there was a tendency for the larger organizations to concentrate their attention on the consumer loan side.
7. Finally, it appeared that the expansion of the local lending market by the introduction of new offices of new multiple office banks resulted in significant increase in competitive pressure. This made those institutions more attuned to the needs and demands of both consumers and small business borrowers.

In view of these conclusions, let me suggest a scenario that represents my expectations of what would happen to the nature of the lending process in local markets if deregulation, as proposed, continues.

Impersonalization of the Lending Process: The structural changes will create larger organizations that would tend to have numerous offices within local market areas. This would lead to a relative impersonalization of the lending process, but one that would not result in a net shift of funds out of the local market area or away from financing smaller organizations. There are two important tradeoffs involved. First, the impersonalization process may mean that lenders would take a closer look at the relative risks and returns associated with alternative financing arrangements with these small

organizations. Some of those who were able to receive adequate financing under the prior small bank regime would now find that they would either not receive it under the large bank regime or they would have to receive it under different credit conditions (or with a larger supply of information to allow the bank to make a decision). Second, the impersonalization would improve the chances for financing of new organizations or organizations that previously were denied access to local bank funds. It is important to remember that the small businesses that are now offering criticisms of the possible affect of these structural changes are those that have received financing in the past. There are numerous small businesses that do not exist now because they were not granted credit with the organizational structure as it has existed. We know nothing about those denied credit under the current banking structure. Those denied credit are probably the more risky and nontraditional types of business organizations, and I think there is some expectation that these types of organizations would appeal more to the lending process that might exist in the multi-office system. That is, there is something potentially good that would come as a result of the impersonalization of the lending process.

Economies of Scale: Large banks tend to have larger ratios of loans to deposits than do small banks. This may reflect another regulation--the reserve requirements of small versus large banks--but everything we know suggests that for every dollar of deposits drawn in, large banks lend out a greater proportion. Second, if it happens that large banks take over the traditional small bank markets, then they are probably more efficient at the process of deposit taking and lending than the small banks. The result would be a lower cost of doing banking business and, with competition, a potential

benefit to small business borrowers who receive credit from these organizations.

Shifts Away from Business Lending: We also have some evidence that suggests that large banks would shift their activities toward the retail or consumer loan side. At first pass this would seem potentially to take funds away from small business organizations. But I think there is a good chance that it would simply involve a shift of the lending process from a small business loan to that same individual entrepreneur receiving a portion of the credit through a consumer loan. Moreover, the emphasis on consumer loans, if it does exist under this scenario, would provide easier credit for those individuals who are consumers of the small businesses output. There are some other issues related to the multi-office banking issue that I take up in the following sections that are concerned with risk measurement and competition.

Risk Measurement--Attitude, Knowledge and Small Business Risk

In my view, the most important limitation on our achieving an efficient and effective financial system within the current structure stems from difficulties in measuring and assessing the risks associated with business loans. In estimating risk, I think it is clearly the case that the brokerage industry, the Merrill Lynches of this world, has a much more sophisticated and technical knowledge of what constitutes risk and how risk should be compensated for through higher interest rates than does the banking industry and than does the industry that one might label as the small business sector. My personal belief is that the narrowness of the banking, savings and loan, and savings bank industry in the past, and the restrictions on the lending activities that have prevented these institutions from experimenting with, gathering information on, and understanding other types of financial markets has led us to the current situation where bankers and financial institution

executives lack an adequate understanding of risk. They are not good at risk assessment of large businesses or small business. The mistakes they make are in evidence every day. One needs only to recall situations involving Penn Square and Seafirst, Franklin National, First National of Midland, the Butcher Banks in Tennessee, or a series of unit bank bankruptcies in small towns in Texas to see that a number of bankers are not aware of risks and do not correctly act on those risks either by demanding higher interest rates or by not making loans to those excessively risky borrowers.

While there is no particular reason to suspect that small businesses are necessarily more risky that large businesses, an inability to assess risk is likely to cause banks, regardless of their size, inadvertently to discriminate against small business organizations. The reason for the discrimination is that there is a greater difference in information on the firm's prospects and risk between the banker and the small business than the banker and the large business. Because of the existence of audited financial statements and sophisticated methods for conveying information to bankers, large businesses have an advantage in their ability to communicate the true risk of the organization for the bank's evaluation. The same information does not exist for small businesses. There is a great difference between the information held by the entrepreneur or the small business organization and the information needed by the banker that ultimately makes the decision as to whether to lend to that firm or not. This makes it very difficult for bankers, given the present system for evaluating financial arrangements, to distinguish good small business risks from bad. We academics tend to think of this issue as pertaining to asymmetric information. Yet whatever it is called, the existence of differential levels of information about risk leads to a situation

whereby banks tend to view potential small firm loans as more costly or more risky.

It is not necessarily true that a super bank system would find this more of a problem. On the one hand, large banks, that may have developed systematic methods of evaluating risks of small organizations, might be more adept at identifying those small loans that would be considered valuable additions to their portfolios. On the other hand, it is true that in a local bank market a local banker might have more immediate knowledge of the operation of a business with which they have maintained a banking relationship. I think this issue cannot be resolved until we get more extensive data on the loan operations of large and small banks. We don't have that yet. Most of the information we have was gained through casual observation and supposition. My point at this time is that there is no a priori reason to think small banks have a better ability to discriminate between risky small borrowers, such that their business lending would be more efficient or in larger volume. Of course, if small banks could discriminate better, they would be more profitable and should be able to compete with large banks in local markets.

Branching--Size and Competition in Local Lending Markets

The evidence we have seems to suggest that large, multi-office banking organizations compete effectively with one another and do so in local deposit and lending markets. Often the number of banking organizations operating in a given local market has increased as a result of the expansion of branching or multi-bank holding companies. Any increase in the number of independent banking organizations in a local market is bound to bring substantial rewards to both small business borrowers and small consumer borrowers. It will not

affect, of course, the large businesses or the national borrowers who have an ability to seek out funds in national banking markets.

I am a firm believer in the fact that super banks with many offices would tend to increase the level of competition most in relatively narrowly defined small banking markets. The typical town of 20,000 to 50,000 might find that the number of banking alternatives would increase by leaps and bounds with the system of super banks as opposed to the traditional system of smaller unit types of financial institutions. There is also a good deal evidence that the expansion of powers granted savings and loan associations and mutual savings banks has meant an increase in competition with banking organizations in these local communities.

An increase in the level of competition for local deposit and loan markets will benefit small business borrowers more if they begin to shop among the alternatives to a greater extent than they have in the past. With increased competition it will be easier to move between banks for different services as prices dictate; and, like other bank customers, small business borrowers will begin to be charged according to the services they purchase from the bank. Experts have testified before your Committee before that small business borrowers, in general, do not have a great deal of shopping experience. This can be overcome, to their benefit, and I will have more to say about this later. I will make some specific suggestions about what can be done to remedy this situation.

As large branch banks expand, they will have to create specific functions to perform adequately in many different markets. I think you will find many of these banks will develop an explicit area of expertise in the small business market. One might find that some banks would tend to specialize in this activity more than other banks. It may not be that all of these large banks

would tend to emphasize small business lending, but some of the banks would certaintly view themselves as having a comparative advantage in the small business lending activity. As long as this small business lending activity is profitable, they have every incentive to gain that local expertise.

Ten years ago, regulators and some trade groups were fearful that the brokerage industry would come to be dominated by large institutional clients—that the stock market was becoming institutionalized. A competitive rate structure was introduced, brokerage firms failed, merged and the industry consolidated. But the individual trader became much better off, and individual participation in the stock and bond markets is at an all time high. It is true that some very large firms cater to small individual clients, while other firms specialize in servicing large institutional clients. In this industry there is almost no relationship between size, as measured by invested capital, and the market in which they specialize.

Extra Banking Competition

Perhaps one of the more important facets of deregulation of the financial services industry will be an expansion of nonbank types of financial institutions into the small business lending market. There are a number of organizations that will move into the market for small business lending and offer additional outside competition for this profitable activity. Apparently, Prudential purchased a bank with the intent of developing a business lending activity. My expectations for business loan markets are analogous to that which took place in the consumer deposit market recently. Money market funds and brokerage houses offering money market funds have captured a substantial portion of the market that traditionally was held by commercial banks. The competition that heated up between brokerage houses, mutual funds, banks, savings and loan associations, and other financial intermediaries has resulted

in significant benefits for the consumer saver. The opportunities that are available for earning competitively determined rates on savings have been very beneficial to the consumer/saver. Organizations such as Merrill Lynch have found it extremely profitable to tap this consumer deposit market. It is reasonable to expect some of them will begin to tap the small business loan market, hoping to cash in on the profitability associated with this activity.

There are a number of specific ways in which this extra banking competition might take place. I alluded to the fact that brokerage houses and some other affiliated organizations have a better understanding of risk than banks. I would expect that their expertise in the area of risk management could be applied to small business financial arrangements. I can visualize a situation whereby a Merrill Lynch or a Prudential-Bache would funnel funds into local offices for lending to small businesses. They do this now, of course, but it takes place indirectly through financing venture capital funds that provide primarily equity based financing for small businesses. Debt funds or a combination of debt and equity funds will be offered by these organizations if it is profitable for them to do so.

Thus, even if, in the worst case, super banks drive out local banks and devote less attention the small business loan market, I expect the financing gap to be filled as a result of the components of deregulation that allow easier access to these markets by venture capital firms, brokerage houses, and firms that engage primarily in lease financing arrangements. Perhaps even organizations that have been on the wane in recent years like the Business Development Credit Corporations will help compensate for any decline that may occur. The same components of deregulation that may (not necessarily would) reduce bank participation in this market would encourage competition from nonbank financial firms.

Analogy with Deregulation and Other Service Industries

Deregulation, of course, has taken place recently in a number of other service industries. As far as we can tell, the benefit to the consumer has far and away exceeded the cost associated with this deregulation. The benefit to the consumer/saver of the demise of Reg Q is among the most obvious. But I think it is has generally been true that the consumer has been made better off by the deregulation that has taken place in the airline and trucking and transportation industries. This is not to say that all participants in these industries are made better off by deregulation, but rather that deregulation has resulted in a net benefit to those who use the services of these industries. Small business firms use the lending services of the banking industry currently. They would be the net beneficiaries along with some other groups in the event that deregulation proceeds along its designed course in the future.

Making the Transition Easy

The one major concern that I do have regarding all of deregulation is the ease with which small business organizations can make the transition to a different type of financial services industry. Primarily because small business organizations are small, they may not have the expertise to be fully aware of what the structural changes are, and how the structural changes are likely to affect them. If they can't get the same loan they have had with the same bank in the past, they may view their position in the world as less desirable and more costly than it need be. Anything that we can do to help them to understand the changes and how or to cope with the transition should be something that should have high priority. This is also an area in which I would expect a committee such as yours to be able play an important role. Let me suggest two possibilities that would ease the transition for small

businesses if their traditional borrowing sources should not be available. One of these has to do with an issue I alluded to before, the perception of small business risk.

We do not know very much about small business risk. Little data are available which allow us to accurately assess which businesses are risky and which are less risky. Unfortunately, the perception among some is that small businesses are more risky organizations. (As a parenthetical point, I don't think this impression is allayed by the lack of success at small business lending that the Small Business Administration 7(a) loan program has experienced in recent years. The high rate of default on SBA guaranteed loans is something which has contributed to banks viewing small business organizations as being particularly risky borrowers.) The Small Business Administration and various trade groups that work both with small businesses and with banks can nurture the production of information that will improve bankers' understanding of small business risk. Both large and small banks should be explicitly studied and questioned to determine what they believe that they need to know in order to be able to properly assess the risk of small business lending arrangements. In turn, small business managers should be made aware of the types of data and financial statements that banks need to make decisions. Thus, while I pointed out before that large and small bankers do not have a very good understanding of risk, it is also true that small business organizations do not have a very good idea of what banks are looking for in terms of information for them to be able to make an appropriate decision on the loan proposal. This is an educational task, of course, but one that would seem to me to have a particularly desirable and immensely useful outcome. Anything we can do that would reduce the informational differences between the small business manager and the banker would reduce the costs of making small

business loans and ease the banker's ability to deal with the problem of assessing small business risk in deciding which loans ought to be made.

The other issue is somewhat related to this, but pertains more to the banks themselves. Emphasis ought to be given to the development of a somewhat standardized loan contract that would be potentially serviceable by a large number of small business organizations with similar types of characteristics and operations. Anything that can be done that would serve to make the contract more standardized would reduce the costs of making these loans and, other things constant, would increase the supply of funds. One of the studies in our book (by Neil Murphy) found that all of the differences in interest rates of small and large loans could be explained by the added cost per dollar of loans incurred in creating and servicing the small loan.

Both of these activities are things that can be expressly undertaken by both governmentally sponsored organizations such as the Small Business Administration and by trade organizations that work directly with banks or small business concerns. In the past you have received testimony before this committee from a number of people who have suggested that it is of immediate concern to begin to collect any information on bank policies with respect to small business loans. Perhaps the single most advantageous thing that you could do in this regard would be to encourage a longitudial study of lending practices of financial intermediaries and repayment characteristics of borrowers stratified by size of loan. There is no doubt that information that might be received from an analysis of a large number of small business loans made by large and small banks would be useful in our understanding of the risk associated with small business lending and its potential profitability. It would also be information that would be extremely useful in accomplishing the two tasks that I set forth above. With this information small businesses could be informed about the information they need to secure loan arrangements, and banks could be made more aware of the experience the industry has had with small businesses and the kind of information they need in order to generate a profitable small business loan portfolio.

Interest Rates and Inflation

Many people are concerned about high interest rates and the impact that high rates have upon lending and productivity of large and small businesses. Past hearings of this committee have had much to say about this issue. I would like to clarify one important point on this subject. I can best do this with an example. If you are willing to concede that a 3% interest rate with no inflation is not unreasonable, then it would take a 20% interest rate with a 10.2% inflation rate to allow the lender the same real return and to cost the borrower the same amount in terms of real dollars.

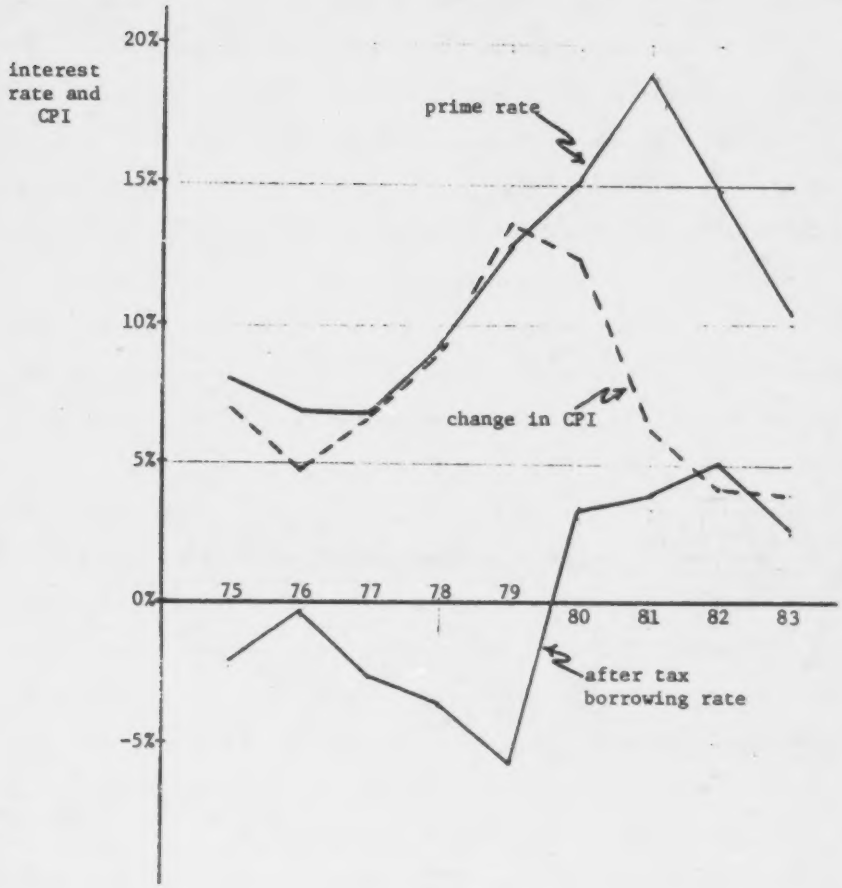
The reason for this is that taxes are charged on nominal and not real interest income. Thus, the 20% interest rate, taxed as income at the marginal income tax rate of 40%, yields an after tax return of 20% (1 - .4) = 12%. Subtracting the inflation rate of 10.2% leaves 1.8%. The 3% rate, less taxes on it at 40%, leaves 1.8% as well.

The graph on the next page has gone back and computed the implied real interest rate based on a 40% tax rate (about the rate paid by all commercial banks over the period) for the years 1975 to 1983. The calculations are based on the prime rate and the consumer price index.

There are a number of conclusions that we might draw from these figures.

1. Interest rates in the late 1970s were very low relative to rates in the 1980s, even when the prime was 12.7% in 1979.
2. Interest rates during the very inflationary times of 1978, 1979, and 1980 were not very high real after tax figures.
3. The reason they were negative in the late 1970s was because inflation had been underanticipated by banks. They have corrected this problem, and in 1981 and 1982 they may have overestimated inflationary pressure.

Real Interest Rates and Inflation



4. Since interest payments to banks are a tax deductible cost of doing business, these figures also reflect the after tax cost of business financing. You can see why firms and consumers were willing to borrow in 1979 and 1980, even though nominal interest rates were extremely high by historical standards.
5. If small business borrowers face lower marginal tax rates than banks and large businesses, the increase in interest rates with high inflation will appear to them more exaggerated (and more expensive) on an after tax basis than they would appear to large businesses and banks. (A new business that might have no income for the first couple of years may find the rates terribly expensive.) The beneficiary of this tax differential is not banks or large businesses but rather the Federal Treasury--that would find tax receipts increasing with inflation.
6. There is no evidence from this that banks were overcharging at any time in the last decade, though it may be that low tax rate borrowers (small businesses?) correctly perceived the real cost of bank financing to be increasing. The cost must be attributable to our tax system (which taxes nominal interest income) not the banking sector.

Mr. NOWAK. Thank you very much for your very complete and thoughtful statement. The 20 pages have an awful lot of substance in them to help us consider both sides of this question, try to arrive at the real impact as deregulation goes forward here, and see, at least as close as we can tell today, what the impacts will be down the road on the availability and cost of credit.

The last point you make is very true. The real cost of interest, the borrowing of the large corporate bodies for merger, sometimes has much less cost than a smaller borrower without the kind of tax leverage that the large corporate merger is available to.

Let me refer back, to something you mentioned about the interest rate. What is your opinion as to the impact of this deficit, both the individual yearly deficit and the cumulative deficit? Do you see that tight interrelationship?

Mr. PETTIT. I think the relationship runs as follows: The existence of the deficit, as it is now and as it is expected to be in the future, is one which is not likely to permit us to maintain a 4-percent inflation rate in years down the road. Therefore, the expectation, of higher inflation rates in the future means that all but short-term borrowing undertaken currently is likely to be priced to reflect those expectations. That is, it is expectations of higher inflation rates in the future that have prevented borrowing rates from coming down more than they have in the past 3 years or so.

Mr. NOWAK. Look at that and say that a year from now the inflation rate goes up to 6 percent. Won't there be a corresponding rise in the interest rate?

Mr. PETTIT. The interest rate would rise. I don't think long-term interest rates would rise quite as much as short-term interest rates as that takes place.

Mr. NOWAK. We have standardized about a 4-percent rate, and we still have this larger gap than we ever have before. You can argue that we subsidized borrowing before, which to a large extent probably led to a lot of the inflation at that point in time. As we are using the interest rate now almost to control, if you will, to a large extent inflation, I am wondering if we are ever going to see this gap closed?

Mr. PETTIT. If the inflation rate were maintained at 4 percent for another year or two, you would find interest rates dropping somewhat.

Mr. NOWAK. Even if the deficit doesn't come down?

Mr. PETTIT. I am not sure how you could actually accomplish that, if the deficit doesn't come down, but I think the financial community is in a sense——

Mr. NOWAK. Let me propose this, because this is intriguing. If the deficit comes down, and inflation stays the same, would you then anticipate inflation coming down?

Mr. PETTIT. Interest rates coming down?

Mr. NOWAK. The inflation rate. What is the interplay between the so-called interest rate, the deficit, and the inflation rate?

Mr. PETTIT. If the deficit can be brought under control, I think we will be able to maintain the relatively moderate inflation rate we have had in the past year or two, 4 percent. If we don't control the deficit, the inflation rate will increase.

Interest rates will follow along, not so much because of the crowding out issue that is associated with Treasury borrowings, but rather with expectations of inflation on the part of the larger financial community, and how they have to price their loan instruments now to anticipate the possible negative effects of an increasing inflation in future months or years.

Mr. NOWAK. Looking at this mix of things that all have some interplay, and also included in this which we have not mentioned, is the impact of our foreign trade deficit. The ability to bring in less expensive, technologies, cars and everything else we are talking about, certainly seems to have a heavy impact on the inflation rate.

I think I agree with your statement about the perception of the financial community. Once they see that it doesn't have to happen, that it just seems like it is going to happen, all of a sudden they get a different attitude. That attitude translates into the lower rates and everything else. The inflation seems to be a combination of a series of things; oil that has stabilized, the importation of $130 billion of manufactured goods and so forth. Your point concerns what the cost of money is to a large profitable corporation or a small business that is getting started without the 40 to 50 percent write-off. It makes a huge difference, as we try to put enough capital in that small business area to keep this whole expansion moving forward.

You also had talked about the expertise of the bank executives who will be coming into this new marketplace. Have you seen much evidence that they are shifting, taking that risk factor that you talked about in your testimony, and rate return into consideration and putting more emphasis on smaller business loans?

Mr. PETTIT. I don't know that I can say I have observed anything particularly with respect to small business loans as opposed to other business loans.

Over the past 4 years, we have seen some particularly poor decisions on the part of banks, both large and small, that resulted in a rather large number of problem banks or bankruptcies. Much of that is due to a lack of accurate perception of the risks associated with the lending or investment opportunities these banks undertook.

Seafirst was not very smart in not looking closer at the types of loans they were purchasing from Penn Square, and it was something that a Merrill Lynch likely would not have fallen into. That firm and other firms like them have had much more experience in dealing with risky investment situations.

Mr. NOWAK. We have all of the right geography and products, maybe there has to be more regulation by the Government?

Mr. PETTIT. Maybe they are subsidizing some of those organizations. Well, it is the FDIC that is likely to face the costs of the policy, they have to come to grips with the issue of federally insured deposits, so that they can control the amount of money that they have at risk.

There is nothing wrong with a few bankruptcies here and there. I would have been one that would have chosen to treat Penn Square, Seafirst, First National of Midland all the same in terms of

payments of depositors, and I don't necessarily see anything wrong, though I am not on the inside, obviously, with bank failures.

I think the failures of some banks is, in fact, one of the market mechanisms that tends to enforce appropriate behavior from lending institutions, and other lenders.

Mr. NOWAK. And of depositors?

Mr. PETTIT. And of depositors.

Mr. NOWAK. Thank you for your excellent statement, and we will probably be calling on you again as we go further in analyzing all of the statements in combination with each other.

Thank you very much.

Our last witness here today is very patient. NFIB has consented to give us the benefit of their statement. I would like to welcome Mr. Bill Dennis, Jr., Director of Research.

Mr. Dennis is no stranger to our subcommittee, having testified before on a variety of issues. He has been with the NFIB for the past 8 years, and has authored a number of studies which have been undertaken and published by that organization. Welcome, once again, and thank you for the courtesy of coming to testify.

TESTIMONY OF WILLIAM J. DENNIS, JR., DIRECTOR OF RESEARCH, NATIONAL FEDERATION OF INDEPENDENT BUSINESS RESEARCH FOUNDATION

Mr. DENNIS. I would like to read my short, prepared statement and insert the longer one into the record.

Mr. NOWAK. Without objection, it will certainly be ordered.

Mr. DENNIS. Mr. Chairman, thank you for inviting me back to appear before the subcommittee. Since our last discussions on the topic of small business and financial institution deregulation, my personal situation has changed somewhat. I have been moved from NFIB proper to the NFIB Research Foundation. The survey function has been moved with me.

Therefore, while my access data has not changed, my ability to address NFIB policy positions has been severely curtailed, a limitation I know the subcommittee will appreciate.

The bulk of my testimony can be found in the attached paper, "The Impact of Financial Institution Deregulation on Small Business: A Small Business Perspective."

That paper reviews the limited empirical data available on the question of small business and financial institution deregulation from the perspective of the small business consumer. It does not address questions from the perspective of the small business supplier of financial services.

Reviewing that paper and the data it presents, an anomaly soon becomes apparent. Despite the recent turmoil among the providers of financial services, for example, Continental Illinois, the movement of Citicorp into Florida, Illinois, and California S&L's, and the failure of several small banks among others, their small business customers appear to have witnessed greater changes between 1980 and 1982, as measured by the surveys, than between 1982 and 1984.

This is the direct result of price deregulation and accompanying adjustments to roller-coaster interest rates occurring during the earlier period.

But the interesting question is, will we see a second discernible wave of rapid and generally adverse conditions for small business consumers of financial services? The answer probably depends on what happens among regulators and legislators here in Washington, barring a major international event.

The Continental Illinois case may have done more to focus the issue than has any other event. The literature tells us economies of scale peak very rapidly in the banking industry. Therefore, size beyond a certain point offers minimal efficiency advantages, but size can offer at least one huge disadvantage. Once a banking institution grows so large that its existence becomes necessary for confidence in the solvency of the Nation's financial system, then we need to ask an entirely new series of questions.

Not the least of these questions is why we should lift size restraints, that is, interstate branching, allowing large banks to grow even larger, thereby making their possible failure all the greater reason for concern?

Or from another perspective, if only large banks effectively have deposit insurance over $100,000, why would a large depositor place his money in any but a very large bank? What is the implication for small banks?

Thus, the second wave to fear from the perspective of the small business consumer is the possibility of increasing concentration of banking resources. Small business in the United States is very fortunate. There are over 14,000 banks in this country. One bank exists for every 15,676 people.

The largest five banks control only 19 percent of deposits. That degree of concentration or lack thereof hasn't changed much for several years. Since small banks tend to work better with small business than large ones, it bodes comparatively well for small firms.

NFIB has a sister organization in our neighbor to the north, Canada. The CFIB continually reports that access to capital is a very difficult problem for Canadian small businesses.

The attached paper shows that generally not to be true in the United States, but look at the Canadian banking structure: 78 percent of all deposits are controlled by the five largest banks; that shouldn't be surprising. There are only 11 banks in the country—1 bank for every 2,221,636 Canadians.

This is the most important potential trend I see in the financial services industry and one over which there are important reasons to be concerned. Presumably, the FDIC's Continental Illinois action was predicated on a precarious international situation.

Since I have no expertise on those matters, I will refrain from comment. However, interstate branching hardly falls within those plausible extenuating circumstances.

While it is clear some changes in the McFadden Act will be necessary to accommodate reality including very rapid State action, wholesale abolition remains ill-advised.

It is my understanding that FDIC witnesses will appear before the subcommittee at a later time. Without exercising much imagi-

nation, the subcommittee will probably wish to ask questions on Continental Illinois and the double standard used with different size banks, comparative risk, et cetera.

These have important and adverse impacts on smaller firms. However, in concluding on a positive note, I would like to mention within the last few years a regulatory action which has the potential of being enormously advantageous to smaller firms.

The FDIC has published rules that pension assets deposited in commercial banks are insured up to $100,000 per pension plan participant. The significance of this ruling is that it allows commercial banks to compete more effectively for pension dollars.

Since banks now provide the only practical intermediary between large pools of pension funds and smaller firms, this ruling permits greater opportunities for small business. In fact, Allegheny County, PA, is experimenting right now with an innovative program using that ruling.

Thank you very much, Mr. Chairman. I will be happy to try and answer any questions.

[Mr. Dennis' prepared statement with attachments follow:]

PREPARED STATEMENT OF WILLIAM J. DENNIS, JR., DIRECTOR OF RESEARCH, NATIONAL FEDERATION OF INDEPENDENT BUSINESS RESEARCH FOUNDATION

The explosion of employment generated by small business over the past decade and one-half has reestablished small business as a significant, vibrant economic and social institution. It has enjoyed a rebound in influence and celebrity over the last few years, although not nearly to the extent an unabashed partisan such as myself might wish or believe deserved. Still, small business has regained sufficient import that its interests and concerns are considered worth discussing in a variety of fora including today's panel.

Like all institutions, small business relies on a host of complimentary institutions to function effectively. Arguably the most important of these complimentary institutions is the nation's commmercial banking system. Virtually all small businesses have borrowed money from a commmercial bank at some point in their existence; 1/ between one-third and one-half are regular borrowers (defined as borrowing at least once per quarter), 2/ and other banking services--such as checking--are vital to borrowers and non-borrowers alike. As a result, significant change in the financial services industry in general and the financial services industry's regulatory environment in specific almost by definition will have significant impact on small business.

Evaluating the impact of financial institution deregulation on small business is difficult. The problem is the almost total lack of empirical data, let alone detailed longitudinal

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1/ Scott, Jonathan A., and Dunkelberg, William C., Credit, Banks and Small Business (National Federation of Independent Business: San Mateo, CA), May, 1983

2/ Dunkelberg, William C., Scott, Jonathan A., and Dennis, William J., Jr., Quarterly Economic Report for Small Business (National Federation of Independent Business: San Mateo, CA), series.

information. In fact, there appear to be just three sources of pertinent data. 3/ Of those, only the National Federation of Independent Business's Credit, Banks and Small Business provides more than a single observation. It's unique character, therefore, makes it the base for the following remarks. 4/

The second difficulty in evaluating financial institution deregulation on small business is the difficulty in defining a small business. After all, the universe consists of about 4 million small employers, 5 million small non-employing businesses, and 17 million firms. These include brand new businesses and mature businesses, growing businesses and declining businesses, profitable businesses and unprofitable businesses, large small businesses and small small businesses, consumers of financial services and providers of financial services, etc. Arbitrarily, I intend to focus my evaulation on operating small non-farm employers as consumers of financial services, recognizing full well this definition eliminates consideration of impacts, many quite substantial, from other perspectives.

3/ The three include: Credit, Banks and Small Business, surveys conducted by the National Federation of Independent Business, 1980, 1982 and 1984; Council for Northeast Economic Action, Empirical Analysis of Unmet Credit Demand in a National Sample of the Business Population, prepared for the Economic Development Administration, Washington, DC, June 1982, and Glassman, Cynthia A., and Struck, Peter L., "Summary of Commercial Bank Lending to Small Business," Studies of Small Business Finance (Interagency Task Force on Small Business Finance: Washington, DC), January 1982.

4/ Credit, Banks and Small Business is the result of three surveys conducted over a random sample of NFIB's more than 500,000 members during the last week of March and the first three weeks of April in the years 1980, 1982, and 1984. While the NFIB membership is approximately 1/7 to 1/8 of the small employer universe, it appears remarkably representative. */ Therefore, it is reasonable to assume the survey's randomly drawn sample reflects the small business population as a whole. The fewest number of responses received of the three surveys conducted was 1,714 in 1984 representing a rate of 25%. The 1980 and 1982 data are summarized in a report of the same name, and the 1984 data are under continuing analysis.

*/ Dunkelberg, William C., and Scott, Jonathan A., Report on the Representativeness of the National Federation of Independent Business Sample of Small Firms in the United States, prepared for the Small Business Administration, Washington, DC, May 1984.

Finally, it is a bit presumptuous to attempt a cosmic evaluation of the small business-banking relationship in 10 pages. But that is the task at hand, a task which judging from the bulk of this paper was not achieved.

Small Business and Banks: 1980-1984

If deregulation is to prove favorable to small business, deregulation should assist small firms reach their financial objectives or, at a minimum, ameliorate current problems in banking relationships. As a result, an evaluation of financial institution deregulation properly begins with a prioritization of small business financial service needs.

No two small businesses are alike; no two have identical banking needs. However, there exists a series of banking functions, each more or less important to individual small businesses, which can be prioritized for the population as a whole. Small business prioritization of such functions, therefore, should provide a useful resource against which to measure the products of deregulation.

Respondents to the three Credit, Banks and Small Business surveys were asked to rank each of ten banking functions on a scale of 1, "Very Important," to 4, "Not Important." Table 1 displays the percentage of respondents evaluating a particular function as "Very Important." For example, 40% of respondents reported it was "Very Important" (the highest ranking) that one person handle their credit needs with the remainding 60% providing lower priority responses or not answering.

Two points become readily apparent in reviewing Table 1. First, there is virtually no change in the evaluation of any function from data point (year) to data point (year). Small business wanted the same things in 1980 it wanted in 1982 and 1984, and in the same proportions. The second point is the relative ranking of the priority assigned each function. Note that getting the cheapest money available is not the function most desired. Rather, small business most wants a personal relationship and credit reliability. Of somewhat lesser importance, although still a priority item, is the cost of money. The next level down is convenience, then a variety of services. At the bottom is the consulting or advising function. 5/

5/ Dunkelberg and Scott factor analyzed the non-price dimensions of the 1980 and 1982 studies. The factor providing the highest coefficients was the consulting function. See, Dunkelberg, William C., and Scott, Jonathan A., "Small Business and the Value of Bank-Customer Relationships," Journal of Bank Research, Winter, 1984.

TABLE 1

"VERY IMPORTANT" IN A BANKING
RELATIONSHIP BY FUNCTION AND YEAR

	Year		
FUNCTIONS	1980	1982	1984
Knows You and Your Business	67%	68%	71%
Reliable Source of Credit	54%	55%	58%
Offers the Cheapest Money Available	47%	50%	50%
One Person Handles Your Credit Needs	40%	40%	43%
Easy Access to a Loan Officer	NA*	42%	46%
Knows Your Financial Needs	34%	NA	NA
Convenient Location	39%*	30%	31%
Offers a Wide Range of Banking Services	34%	32%	32%
Knows Your Industry	29%	27%	26%
Provides Helpful Business Suggestions	24%	21%	22%
Provides Ideas to Improve Bank Services to You	19%	17%	19%
ANNUAL AVERAGE	39%	38%	37%

* In the 1980 survey, "Easy Access" was used instead of "Convenient Location." It was subsequently pointed out "Easy Access" may have been interpreted as a "Convenient Location," the intent, or "Easy Access to a Loan Officer." In the 1982 survey, changes were made to correct that possible problem.

Ascertaining perceived needs is only half of the equation, however. The other half is how well banks fill those needs.

The Credit, Banks and Small Business studies asked respondents to evaluate their principal bank on the identical ten functions using the identical four point scale. Results can be found in Table 2. As with desired functions, actual performance didn't change much from data point (year) to data point (year). There were two exceptions. The "Good" (highest rank) evaluation of the function "Wide Range of Banking Services" rose nine percentage points between 1980 and 1984 indicating a substantial increase in the level of banking services available to smaller firms. The function "Reliable Source of Credit" rose seven percentage points over the same period,

indicating small firms felt more comfortable in their credit relationships. Since 1980 was a turbulent year in financial markets, the improvement may be a product of better economic conditions.

TABLE 2

"GOOD" BANK PERFORMANCE
BY FUNCTION AND YEAR

	Year		
FUNCTION	1980	1982	1984
Easy Access to Loan Officer	NA	50%	55%
Reliable Source of Credit	46%	48%	53%
Knows You and Your Business	46%	46%	47%
One Person Handles Credit Needs	44%	44%	50%
Wide Range of Banking Services	42%	47%	51%
Knows Your Financial Needs	26%	NA	NA
Offers Cheapest Money Available	26%	22%	23%
Knows Your Industry	24%	21%	23%
Provides Helpful Business Suggestions	20%	18%	17%
Provides Ideas to Improve Bank Services	14%	15%	13%
ANNUAL AVERAGE	34%	37%	39%

Table 3 is a composite of Tables 1 and 2. It shows the percentage ranking a function as "Very Important" less the percentage giving a bank the top performance rating ("Good"). Note there were four bank functions consistently given higher ratings on actual performance than on desirability. They ranged from plus 25 percentage points -- "Convenient Location" -- to plus seven percentage points -- "One Person Handles Credit Needs." The four are similar in that they possess a convenience/service orientation. Yet, not one of those convenience and service functions was ranked at the top of the functions most desired.

In contrast, two of the three most desired functions -- "Knows You and Your Business" and "Cheapest Money Available" -- were evaluated relatively poorly on the difference between desired and actual performance. The gap was a minimum of 21 percentage points and stretched as high as 28. The substantial difference does not necessarily mean either was evaluated badly in absolute terms. To

TABLE 3

ACTUAL AND DESIRED BANK PERFORMANCE
BY FUNCTION AND YEAR

FUNCTION	1980				1982				1984			
	Actual Performance Minus Desired Performance Percent	Rank	Rank of Actual Performance	Rank of Desired Performance	Actual Performance Minus Desired Performance Percent	Rank	Rank of Actual Performance	Rank of Desired Performance	Actual Performance Minus Desired Performance Percent	Rank	Rank of Actual Performance	Rank of Desired Performance
Convenient Location	13	1	1	5	25	1	1	7	25	1	1	7
Wide Range of Banking Services	8	2	5	6	15	2	5	6	19	2	4	6
Easy Access to Loan Officer	NA	NA	NA	NA	8	3	2	4	9	3	2	4
One Person Handles Credit Needs	4	3	4	4	4	4	6	5	7	4	5	5
Provides Helpful Business Suggestions	-4	4	9	9	-3	6	9	9	-5	7	9	9
Provides Ideas to Improve Bank Service	-5	5	10	10	-2	5	10	10	-6	8	10	10
Knows Your Industry	-5	5	8	8	-6	7	8	8	-3	6	7	8
Reliable Source of Credit	-8	7	2	2	-7	8	3	2	-2	5	3	2
Knows Your Financial Needs	-8	7	6	6	NA	NA	NA	NA	NA	NA	NA	NA
Knows You and Your Business	-21	9	2	1	-22	9	4	1	-24	9	6	1
Offers Cheapest Money Available	-21	9	6	3	-28	10	7	3	-27	10	7	3

NA = Not Available

the contrary, "Knows You and Your Business" in 1980 received the second highest performance evaluation of the ten functions analyzed. The enormous gap was simply the result of a very large demand for the particular function.

These data and the foregoing discussion appear to offer a few simple yardsticks to help measure financial institution deregulation. Small business badly wants, and has some difficulty finding, a personal banking relationship. Any change (positive or negative) in such relationships from deregulation should have a substantial bearing on the evaluation of deregulation's success. Small business is also dissatisfied with price. That criterion, too, must be an important part of the evaluation. Reliability as a credit source is a vital bank function and one apparently filled reasonably well. Deterioration in reliability, however, should be viewed with alarm. Finally, while convenience and services are not unimportant to small business, banks are more than adequately filling demand. For small business, more bank service is not necessarily better.

Price Deregulation

Deregulation of financial institutions normally is considered to consist of three parts: price deregulation, already largely accomplished through the Depository Institutions Decontrol Act (DIDA), and the abolition of Regulation Q; product deregulation, largely unaccomplished due to proponents' inability to modify Glass-Steagall; and geographic deregulation, caught in a "never-never" land between Federal regulators and Federal legislators.

Interest rates charged small businesses have climbed dramatically over the past decade. In nominal terms, they have almost doubled and for a period were even higher. Nominal rates don't tell us very much, however. More useful measures are real interest rates loosely defined as the interest rate minus inflation, and interest rates charged minus the national average prime.

Table 4 and Chart 1 selectively outline development of the real small business interest rate over the past several years. Note on Chart 1 that prior to 1979, the real rate was often negative; interest rates were lower than inflation rates. Clearly, that situation couldn't continue over an extended period without destruction of our financial institutions, and it didn't. The real rate began to increase, and now small business pays an average 10% real interest rate. That is high historically -- not only measured by post World War II standards, but by standards of the 1930s which, we sometimes seem to forget, experienced very high real rates.

The second measure may be a bit more parochial. But I would argue it is also important. That measure is the interest rate minus the national prime. Unfortunately, our time series is not what we would like it to be. Further, the prime rate has increasingly lost its meaning.

Table 4

COMPARATIVE INTEREST RATES*

Interest Rates	Year.Quarter 79.1	79.2	79.3	79.4	81.1	81.2	81.3	81.4
Nominal Prime Rate	11.8%	11.7	12.1	15.1	19.2	18.9	20.3	17.0
Real Prime Rate	3.5%	3.4	4.2	7.9	8.8	13.4	9.6	8.9
Nominal Small Business Rate	12.2%	12.7	12.5	14.4	16.0	16.1	17.4	17.5
Real Small Business Rate	3.9%	4.4	4.6	7.2	5.6	10.6	6.7	8.4
Spread (in percentage points)	0.4	1.0	0.4	-0.7	-3.2	-2.8	-2.9	-0.5

	82.2	82.3	82.4	83.1	83.2	83.3	83.4	84.1	84.2
Nominal Prime Rate	16.5%	14.7	12.0	10.9	10.5	10.8	11.0	11.1	12.5
Real Prime Rate	11.1%	11.4	8.5	5.9	7.9	7.8	6.7	6.7	8.0
Nominal Small Business Rate	17.6%	15.4	14.1	13.5	13.2	13.4	13.3	13.2	14.0
Real Small Business Rate	12.2%	12.3	10.6	9.3	10.6	10.4	9.0	8.8	9.5
Spread (in percentage points)	1.1	0.7	2.1	3.4	2.7	2.6	2.3	2.1	1.5

* Rates do not include any fees, compensating balances, etc.

The notion that small business always pays two to three points above prime and sometimes more is folklore. The Credit, Banks and Small Business report debunked that idea in its first empirical test. It was learned that few small businesses paid more than two points above prime. However, since the data for that report were collected, it appears that spread is moving into the ranges previously established by folklore. With no reason to believe that small business transaction costs have risen relative to others or that small business risk has risen relative to others, it seems clear some rate shifting has occurred. But we do not know whether changes which have occurred in the last two years represent a temporary or permanent phenomenon.

The second impact we have seen is the balancing of urban and rural interest rates. Traditionally, small business borrowers have paid in the range of one to two percentage points less for their money in rural areas than in urban areas. Part of the difference was overhead. Facilities, labor, etc., cost more in an urban environment. But the saver in urban areas got more as well because there were more options than the Regulation Q-governed passbook savings. As a result, once price deregulation occurred, rural rates rose relatively more than did urban rates.

Complicating any rural/urban analysis is the third major change experienced in the last few years--the variable rate. In reflection, those of us charged with collecting data on small business did not do a good job recognizing the speed with which this concept would be brought into common practice. In the late 1970s, variable rate loans appeared to be largely an urban phenomenon tied to lines of credit. By the second quarter of 1982, almost one-third of all short-term loans were on a variable rate. Two years later, the percentage had increased by 11 points. And there is no indication it has peaked. 6/

Clearly, high interest rates are not favorable to small firms and they are perceived to be a problem. It was noted previously that the "cheapest money available," while not the paramount concern, was a very important one and one not satisfactorily addressed. Should further evidence be required, one needs only review a data series entitled "Single Most Important Problem" from NFIB's Quarterly Economic Report for Small Business. 7/ As can be seen in Chart 1, the percentage of small firms identifying "Finance-Interest Rates" reached the 5% range in the late '70s. As rates rose, so did the percentage identifying it as their single most important problem. Of those borrowing, it was not unusual for "Finance-Interest Rates" to be identified as the number one problem by over 60% during the early 1980s.

The curious part is that, despite small business concern over rates, small firms tend to be captive consumers. They tend not to shop for money. Nearly 60% reported using one bank exclusively in the 1984 survey and another 30% reported using only two banks -- virtually no change from 1980 or 1982.

The lack of shopping bring the amount of competition into question. If there is no shopping, perhaps there is no competition. Yet, small business perceives competition increasing. In 1980, a net 11% had

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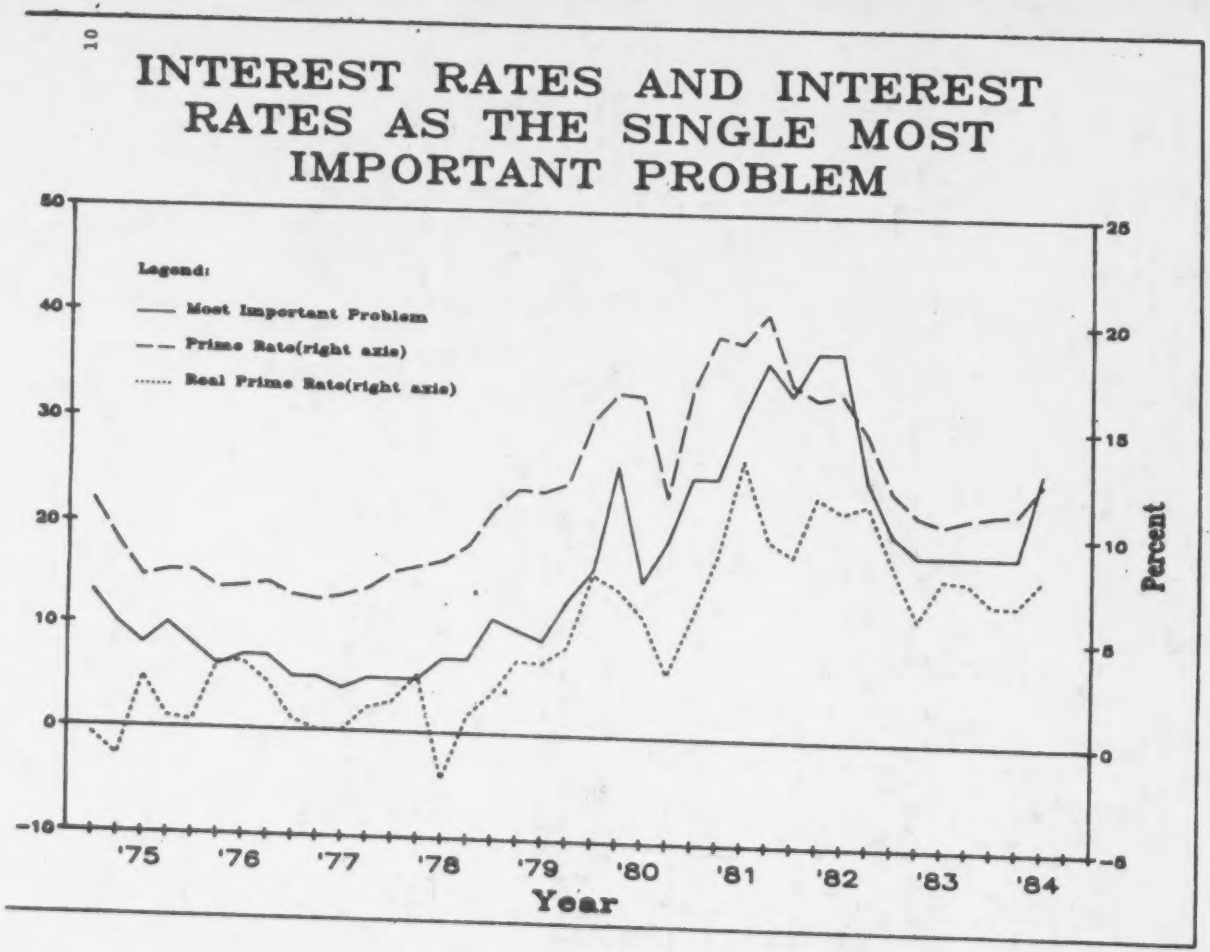
6/ Dunkelberg, Scott, and Dennis, op. cit.

7/ Dunkelberg, Scott, and Dennis, op. cit.


10
INTEREST RATES AND INTEREST RATES AS THE SINGLE MOST IMPORTANT PROBLEM
Legend:
Most Important Problem
Prime Rate(right axis)
Real Prime Rate(right axis)
50
40
30
20
10
0
-10
25
20
15
10
5
0
-5
Percent
'75
'76
'77
'78
'79
'80
'81
'82
'83
'84
Year

noticed an increase in competition for their banking business over the past five years; two years later the figure stood at 18%; and by 1984, it had risen to 29%. Moreover, nearly 40% indicated they had been solicited for their banking business recently.

But what type of competition? Competition may be over any number of functions: convenience, services, deposits, etc. Recall the increasingly higher evaluation small business provided a "Wide Range of Banking Services." Apparently, it is these service-convenience areas, the ones in which there is already a small business surplus, that have benefited from greater competition. There is no indication price competition is also one of them, though it is harder to detect in a period of rapidly changing rates.

Small business reticence to adopt the variable interest rate also may serve to nudge average interest rates higher. There is no empirical evidence of which I am aware on the question. However, bankers argue, and I am inclined to agree, that small business prefers a fixed rate at a somewhat higher level than one would normally expect the average of a variable to be. In effect, small business is paying the bank an "interest rate insurance premium" in exchange for the fixed rate. The reason, of course, is certainty. In this regard small businesses often resemble consumers. The critical factor is the payment, not the interest rate.

The reason for small business acquiescence to the higher rates is that small business is willing to pay a price for a personal and reliable banking relationship. I do not mean to suggest that there are neither limits to the price nor that it is particularly agreeable. But it is recognized as a cost of business and treated as such.

This is not irrational economic behavior on the part of small business. Lending to small firms is highly subjective. So much of a small business success is contingent on the management ability and integrity of the owner. Human capital always involves subjective decisions, and the ability of an entrepreneur or small business owner may be more subjective than most. In fact, a discriminant analysis involving most common objective measures of credit worthiness conducted over the Council for Northeast Economic Action's sample poorly predicted the ability of a specific firm to obtain credit. 8/

It would appear that the small business price for reliability has paid off. Not only has the evaluation of "Reliable Source of Credit" increased over the past four years, but most operating small

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8/ Council for Northeast Economic Action, op. cit.

businesses simply don't have a credit availability problem. 9/ Table 5, for example, provides the small business view of how well their credit needs have been met. Note that those who reported credit demands met outnumbered those whose demands were not met by margins of 6-1. 10/ The slight erosion between 1980 and 1984 probably represents goods risks who simply left the market. 11/ Those numbers can be augmented by objective data showing reported loan rejections (on last loan request) at 13%, 11%, and 10% respectively and showing the amount of the loan to be 90% or more of that originally requested as 83%, 83%, and 90% in the three surveys.

Table 5

SATISFACTION OF SMALL BUSINESS CREDIT NEEDS

CREDIT NEEDS	1980	1982	1984
All Needs Met	56%	51%	51%
Most Needs Met	26%	22%	18%
Some Needs Not Met	10%	9%	8%
Major Needs Met	4%	5%	5%
Non Borrower; NA	4%	13%	18%

Product Deregulation

Differing from price deregulation, small business has largely no experience with product deregulation. Much is, therefore, left to speculation and arguments over the applicability to the modern world

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9/ In a recent survey of 72 potential small business problems, "Interest Rates" ranked number one, but "Obtaining Long Term Loans" and "Obtaining Short Term Loans" were relegated to the 45th and 38th positions respectively. See, William J. Dennis, Jr., Small Business Problems and Priorities (National Federation of Independent Business: San Mateo, CA), April, 1983.

10/ Both Glassman and Struck, op. cit., and the Council for Northeast Economic Action, op. cit., found credit demands being met by lesser margins than reported here.

11/ The percentage of small firms "borrowing regularly" declined from 50% in 1980 to 39% in 1984. */ It is likely that many of the "better firms were first to abandon the credit markets as the economy recovered and cash flow improved. The same phenomenon may also have helped improve reliability scores.

*/ Dunkelberg, Scott, and Dennis, op. cit.

of the conditions which resulted in Glass-Steagall. This is particularly true for small business consumers of financial services contrasted to small business providers of those same services.

Proponents argue increased competition at worst can do no harm and at best will have the salutory effect of lowering prices. Opponents argue conflict of interest, potential coercion of borrowers, and concentration. But whatever the view one accepts, it is important to recognize that providing more services, e.g. insurance, real estate, doesn't create a better lender.

Prior to price deregulation, banks provided "free" customer services. Of course, those services were never free. Rather, they were financed in some other manner, quite possibly by someone not even using the services. That has changed. Fees for services are now rather common. As early as 1980, the quality of non-price bank performance characteristics was not significant in explaining loan rates even when controlling for such factors as risk. 12/ But whether that represents a change cannot be empirically demonstrated. Therefore, it is not possible to evaluate whether or not explicit charges for services work to small business advantage.

There is one type of product deregulation clearly favorably to smaller firms. That deregulaton is the grant of authority to S&L's to begin making commercial loans. No one expected S&L's to move rapidly into the area, and the data would suggest that to be the case. Yet in 1984, as many as 29% reported a solicitation from a non-bank financial institution.

Geographic Deregulation

The McFadden Act is the primary Federal statute governing interstate banking activity. Under the Act, at least theoretically, commercial banks are prohibited from conducting banking activities in other states. A variety of regulatory interpretations have undermined that ban, however, and all interested parties now appear in agreement that some legislative redefinition of the Act is necessary. There are considerable differences of opinion over the direction such a redefinition should take.

There are two approaches to evaluate the possible implications for small business of interstate branching. The first is to compare states with different types of intrastate branching laws. The second is to compare the performance of large banks and small banks on the assumption that interstate branch banking will drastically reduce the number of small banks (replaced by branches of larger banks).

12/ Dunkelberg and Scott, "Small Business and the Value of Bank-Customer Relationships," op. cit.

There are three types of state branching laws, state-wide, limited, and unit. In their purest forms, state-wide branching recognizes no geographic bounds within a state, while unit laws embody the one-bank, one-location concept. Limited falls between. These pure types have been modified by differing treatment of holding companies and exceptions such as the New England interstate branching experiment. However, it remains a reasonable procedure to compare the performance of state-wide branching states against unit states in particular in order to assess the impact of interstate branching on small business. If the evidence shows unit states perform better for small business, it can be reasonably argued interstate branching will impact small business adversely. If state-wide branching states out perform unit states, then the opposite is probably true.

Unfortunately, the 1984 Credit, Banks and Small Business data are not yet available by branching status. If we review the 1980 and 1982 data, however, the distinct impression left is that there are few, if any, benefits small business will derive from interstate branching.

Table 7 presents the performance of banks on selected functions by status of the branching law in which the evaluated bank operates. It will be recalled that "Knows You and Your Business," "Reliable Source of Credit," and "Cheapest Money Available" were the three functions most desired in a bank. Further, actual performance on two of three was significantly below desired performance levels. "Convenient Location" and a "Wide Variety of Services" in contrast resulted in higher performance evaluations than desired.

Table 7

"GOOD" RATING OF SELECTED BANK FUNCTIONS BY BRANCHING STATUS AND YEAR

	Unit		Limited		State-Wide	
FUNCTIONS	1980	1982	1980	1982	1980	1982
Knows You and Your Business	50%	49%	47%	47%	42%	42%
Cheapest Money Available	28	25	25	23	24	18
Reliable Source of Credit	50	53	47	49	42	44
Convenient Location	*	54	*	57	*	54
Wide Range of Services	43	49	44	47	41	46

* = Not Applicable

Note on Table 7 that states with "unit" laws consistently are evaluated better than are states with "limited" laws, which in turn are consistently evaluated better than states with "state-wide" laws. 13/ In other words, small business receives more of what it values most in unit states. The same is not true of bank functions which appear in oversupply. The convenience/service oriented functions received a similar evaluation from small businesses located in states with different branching statuses. Thus, the competitive strengths of banks in unit states appear to be where small business want them.

Other data tend to confirm the picture just presented. 14/ For example, a small business in a state wide branching state was anywhere from over twice to 50% more likely to have had its latest loan attempt rejected than a small business in other states.

The point not clear is interest rates despite the better evaluation given in unit states. The reason is the variable rate and the roller coaster interest rate phenomenon recently experienced. When rates are rising, average small business interest rates in areas with higher percentages of fixed rate loans rise more slowly than those with greater percentages of variables. When rates are declining, just the opposite occurs. Since variable rates are more often found in state-wide branching states, much of the relative rate among states appears dependent on the direction and speed of rate changes at a specified point in time.

The bulk of dollar volume small business loans originate in small (less than $100 million in assets) and medium-sized ($100 million - over $1 billion in assets) banks. It is estimated that large banks (more than $1 billion in assets) provide about one-fourth of the small business total compared to two-thirds that for large business. 15/ To no one's surprise, small and medium sized tend to be small business banks and large banks tend to be large business banks.

13/ Multi-variate regressions have been run to control for a variety of potential intervening variables, and subsequently also as a check on the ability of cross-tabulations to accurately represent the data. They do. See, for example, Dunkelberg, William C., and Scott, Jonathan A., "Bank Structure and the Small Business Loan Market," Proceedings: Bank Structure and Competition (Federal Reserve Bank of Chicago: Chicago, IL), April, 1982.

14/ Ibid.

15/ Glassman and Struck, op. cit., pg. 7

While geography has undoubtedly influenced this distribution of resources, small business has also been more satisfied with the performance of small banks than large ones. 16/ Small businesses evaluate their banks more favorably, and some objective measures such as rejection rates support that evaluation. 17/ The differential in performance evaluation between the 1980 and the 1984 observations has narrowed, however. Still, there remain systematic differences in perceived knowledge of the firm and credit reliability, those bank characteristics small business most desires in a banking relationship.

The small business segment most impacted by the bank size differential appears to be the relatively new firm (0-5 years old). Not only are the loan applications of these firms rejected by larger banks with greater frequency than they are by smaller banks, 18/ but the difference in performance evaluation on those bank characteristics most important to small firms are consistenly higher among newer firms than others. Once a small business becomes established and is reasonably successful, however, bank size appears a less important factor in shaping the banking relationship.

Large banks are clearly attempting to increase share in the small business market. Yet, small banks on balance continue to exhibit more favorable small business performance. While there is no empirical evidence of which I am aware explaining those differences, there are probably two reasons. The first is length of command chain. The second is mobility of bank personnel.

Large organizations need formal rules to function effectively. Rules imply quantifiable measures, routinized procedures, formal channels, etc. Loan officers in these organizations are taught the rules and are expected to abide by them. But small business lending is highly subjective and highly personalized. Rules and individual subjective decisons don't always fit well. When a lengthy chain of command exists, inserting flexibility into the rules and obtaining decisions tend to be more difficult. Hence, when there is no clear answer, the process can become time consuming and relatively expensive. It is noted in this regard that loan rejections appear more frequent in branch offices than in the headquarters office, but the data is too thin to be more than suggestive.

16/ Dunkelberg and Scott, "Bank Stucture and Small Business Loan Markets," op. cit., unpublished regression results.

17/ Between 1980 and 1984, the substantial price differential between large and small banks disappeared.

18/ Glassman and Struck, op. cit.

The second reason for the continued edge small banks enjoy may be loan officer mobility. Within reason, larger institutions move personnel from location to location as part of the promotion process. Personnel movement implies a relearning process, a process for which the small business customer must pay.

Small business appears to have more satisfactory banking relationships with small banks and those in unit states. That situation obviously varies from bank to bank and business to business. However, on balance, diminution of the role of small banks and the enhancement of the role of large, branched banks does not offer small business an encouraging prospect. There appears little to gain and much to lose. Repeal or significant alteration of the McFadden Act as a step in banking deregulation, therefore, has little to commend it from the small business prospective. 19/

The Impact of Deregulation

My remarks have been largely descriptive. I don't apologize for that fact simply because there has been so little exposition of the limited empirical data which do exist. Unfortunately, even exposition of the empirical data as they exist does not help in an evaluation of deregulation to the extent one might wish.

Small business has priorities in developing its banking relationship. Those priorities vary from firm to firm. But it seems clear that, on balance, small business wants a personal relationship with the banker and to some degree is willing to pay for it. If the price for the relationship becomes too high, small business can switch. Successful small-business bankers understand this critical balance.

The decision to switch banks is an important one. It has costs and risks. The subjectiveness of the loan decision is an example of such risks, and the leaning curve of the lending officer (vis-a-vis the business) is an example of such costs. Yet, it remains a viable option for the small business and a behavior-modifying threat to the bank. Thus, real competition for the banking business of smaller firms is vital. The question is the amount of competition actually created by deregulation and amount of actor shuffling occurring.

19/ For a differing view, see, Leveson, Irving, Capital Markets Serving Small Business: Implications of the Rapid Evolution of the Financial Services Industry, prepared for the Small Business Administration, Washington, D.C., August, 1982.

Separating the effects of deregulation from other economic phenomena (e.g. inflation, large deficits) experienced over the same period is at best difficult and at worst impossible. But it is not difficult to characterize the financial environment during the period since rate deregulation was initiated as one inimical to small business. Marginal plusses assuredly did appear over those years, but so did substantial reverses. Thus, while I cannot and will not attribute a specified portion of recent interest rate woes to deregulation, deregulation cannot be held blameless.

While geography and product deregulation are issues for the future, our experience with geographic deregulation in the states has provided no basis to be optimistic over the small-business benefits of national or regional branching. The data would suggest the contrary. Unfortunately, an argument on product deregulation lacks a similar experience base.

One can make an impressive case for deregulation of the financial services industry, but it cannot be done from the small-business prospective. At least, it cannot be done employing the data now available. Unless one delves into more arcane matters such as the impact of interest rate changes on the national savings rate, etc., the data simply provide no support for the deregulation point of view. Unfortunately, the empirical case from the other perspective is not as strong as one would like. The data, on balance, certainly support the latter view, however--particularly with regard to price and geographic deregulation. Therefore, the small-business perspective is one of general opposition to financial service industry deregulation, an opposition made painful by its traditional support of deregulatory activities.

Prepared 8/31/84

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Mr. NOWAK. In the survey that you have taken, you have categories by function here, they are expressing their opinion as to whether or not the relationship is very important. Right at the top of that is you, and you know your business.

Most bankers have steadfastly held, in fact, that there was little growth from 1980 to 1984. If we had widespread mergers and other larger institutions coming in from out of the area, or out of the State, would you think that would be significantly effective?

Mr. DENNIS. The only empirical evidence we have provides us some indication. If we look at small business responses to questions about desired bank characteristics by whether or not the respondent was in a unit State or a statewide branching State, and then control for other factors, it is clear that the small business wants are similar in all States.

In other words, a small business in a statewide branching State wants the same things in the same degree from its bank as does one in a unit State.

Looking at the evaluation of bank performance, table 2, small business provides a considerably different view of the world between statewide branching and unit States. Banks in unit States are viewed much more favorably than are banks in statewide branching States, although there has been some narrowing of that in the past 4 years.

If that is any indication of what is to come, it is clear that that is an adverse trend.

Mr. NOWAK. Chemical Bank is one institution that has opened within their organization a small business division, and that has dedicated both personnel and equipment to the servicing of small business in their various areas. In fact, I understand they have expanded that to computer services, payrolls and accounting, and other services that are necessary and used by the small business community.

Have you had any feedback from that?

Mr. DENNIS. We have not had any feedback on Chemical Bank specifically. As I recall, the Chemical Bank definition of a small business is anywhere between $5 and $50 million in gross receipts. That excludes most of the small businesses in the country. To what extent they are serving their customers, I have no basis on which to report.

Mr. NOWAK. Is there a lot of concern expressed in the small business community as to availability of credit at the present time?

Mr. DENNIS. Availability doesn't appear to be a problem, or at least doesn't appear to be a problem among operating businesses. Since the 1974 period, their concern is cost. They are very concerned about cost.

Look at the chart on page 10. You will see what small businesses consider to be their single most important problem. The data comes from a different series of studies we have done. If you look at the solid line, through 1976, 1977, 1978, and 1979, finance and interest rates really are not considered the single most important problem by very many businesses.

We are talking about the 5- to 6-percent range. Now, start moving into late 1979, early 1980, 1981, 1982. The line moves up. Then it begins to rapidly fall, and in late 1983, you can see it starts

to move back up quite rapidly again. So it is really the rate that they are concerned about. If you are talking about a new business, that is a different situation. Clearly, the starter is in a much less advantageous situation on the availability question than is an operating business. In fact, I believe the Interagency Task Force addressed that to some degree.

Mr. NOWAK. Has the NFIB taken any position on either the Garn or the St Germain bills that are pending?

Mr. DENNIS. I can report as an uninterested observer, that the staff has looked at them, and it is my understanding that they have taken a position on aspects of them. I do not know whether or not they have taken a position on the entire—each of the entire bills.

Mr. NOWAK. At the present time, the availability question you have answered, would seem, to some degree at least, to minimize a crowding out theory of the deficit.

Mr. DENNIS. Well, not necessarily. Under the crowding out theory prices would be driven higher, thereby making some potential borrowers opt not to borrow.

Until very recently borrowing has been substantially reduced, in terms of numbers of smaller firms. To some extent, that is the elimination of the inflation-related survival borrowing which went on in the early eighties.

The borrowing was required to keep one step ahead of rising prices, so we have had some reduction in the number of small firms borrowing. Again, that takes some pressure off of the markets. In the last two quarters, that has begun to reverse itself.

Mr. NOWAK. All right, let me conclude by thanking you for another very complete statement. We are going to be trying to combine this and to get this in front of the Banking Committee members so that when they look at all of this, small business at least is considered in the type of manner that its impacts have shown in especially employment, and then new jobs that are being created.

As many of the large multinationals move overseas, there will be new opportunities for small businesses to come in and fill some of those gaps. Certainly we want to make sure there is credit available, and even though it costs more, it would at least give the opportunity to start the participation, and give the economy those opportunities to expand. We will probably get back to you, as well as the others, with some final questions and try to wrap up a complete statement.

Thank you very much for your appearance. The hearing will stand adjourned.

[Whereupon, at 1:45 p.m., the subcommittee adjourned, to reconvene subject to call of the Chair.]

APPENDIX

APPENDIX A.—ADDITIONAL CORRESPONDENCE FROM THE SBA TO THE COMMITTEE ON SMALL BUSINESS, WITH ADDITIONAL COMMENTS

U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

OFFICE OF CHIEF COUNSEL FOR ADVOCACY

SEP 5 1984

Honorable Henry J. Nowak
Chairman
Subcommittee on Tax, Access to Equity Capital & Business Opportunities
Committee on Small Business
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

I appreciate the opportunity to share my views on current trends in the financial services industry, bank safety and soundness and the impact of deregulation on small business financing.

You are to be commended for your continuing efforts to examine this very difficult question of the impact of financial services deregulation on small business.

Enclosed are materials reflecting testimony, letters of comment and research in the area of financial services deregulation and small business which have been undertaken since your last hearing on the subject. I request that these materials be submitted for the record and would be glad to assist you or your staff in any specific area that may develop in the course of your hearing.

Yours very truly,

Frank S. Swain

Frank S. Swain
Chief Counsel for Advocacy

Enclosures

U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

OFFICE OF CHIEF COUNSEL FOR ADVOCACY

JUL 6 1984

Honorable Berkley Bedell
Chairman
Subcommittee on General Oversight
and The Economy
Committee on Small Business
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I appreciate the invitation to share my views on banking deregulation with you and Congressman Schaefer for your July 9 hearing in Littleton, Colorado. I am sorry that I am unable to participate in person due to previously scheduled commitments. I am eager, nevertheless, to respond to any questions regarding this issue. I welcome your attention to this issue, having devoted considerable effort myself to research and working with small business groups regarding regulation of the financial services industry.

The Office of Advocacy was created in 1976 to speak out for reduced regulatory burdens and costs for small businesses and to represent the views and interests of small business before federal agencies and the Congress.

The dramatic changes occurring in the financial services industry have been well documented. It is important that this attention not obscure the importance and needs of our Nation's 14 million small businesses and small financial institutions. This letter will focus on the concerns of small businesses and small banks within the new and uncertain deregulatory environment of the financial services industry.

SMALL BUSINESS FINANCING IN A CHANGING FINANCIAL ENVIRONMENT

Our primary concern regarding small business financing is access to capital at competitive rates. The success of small business is dependent upon access to both equity investment and credit from financial institutions operating in efficient capital markets. Small businesses, as well as large, need to scrutinize and understand the new financial marketplace.

Banks are important sources of small business credit and capital, providing operating capital through inventory and receivables financing, real estate financing, and intermediate term loans for equipment. Overall, small firms owe 20 to 30 percent of their total financial liabilities to banks.[1]

Small corporations use about $85 billion annually to purchase assets necessary for their businesses. While over half these funds are generated by depreciation and retained earnings, trade credit and short-term debt was the source for an important 25 percent of the funds raised by small corporations between 1978-1980.[2] Large corporations have a similar reliance on trade credit and short-term debt, but use long-term debt twice as much as small firms.

Because small firms depend more heavily on short-term credit than large firms and because small firms have higher debt/equity ratios, small firms are particularly sensitive to interest rate fluctuations. The stability of credit markets and access to them are consequently of deep concern to small business.

Nonbank lenders are becoming increasingly important to small business borrowers. One measure of this is found in SBA's own guaranteed loan program. In 1980, all of the top 15 lenders out of the 11,000 participants in the SBA's 7(a) loan guarantee program were commercial banks. In 1983, the list of the top 15 included two savings and loans associations and three non-depository financial institutions.[3]

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[1]The share of credit market funds advanced by commercial banks, relative to that advanced by other private financial institutions (one-fifth) probably underrepresents the importance of banks in meeting small business credit needs. See Federal Reserve Board, Flow of Funds Account, Third Quarter, 1982.

[2]The State of Small Business: A Report of the President. Small Business Administration, Office of Advocacy, 1984.

[3]The SBA program is an important component of small business credit particularly for intermediate and long-term financing. In Fiscal Year 1983, this program provided $2.6 billion in credit guarantees to banks and other financial institutions extending small business credit. The total value of outstanding guarantees is $7.2 billion.

Other sources of small business credit in addition to banks, savings and loan associations and trade credit include finance, leasing and factoring companies, and loans from shareholders.

This picture of small business credit has developed in a highly regulated environment, both at the state level and nationally. Despite pervasive regulations for key players in the financial services industry (banks, savings and loan associations, retailers, insurance companies, and securities firms), changes are occurring rapidly in financial markets. In 1980, Congress acted to accommodate the banking regulatory scheme to these changes through phased elimination of interest rate ceilings on deposits. In 1982, Congress acted to allow all depositories to compete with money market mutual funds and permit expanded commercial lending powers for savings and loans associations and mutual savings banks. The states, as well, have begun to allow banks to do what the federal government has traditionally prohibited them from doing. The reciprocal interstate branching bills are an example.

Future decisions to be made by federal and state governments and regulators of financial service providers are important to small business owners since these decisions can hasten or delay the pace of beneficial developments in financial services markets and can alter the structure of the industry that provides such a key commodity - credit to small firms.

A. Impact of Deregulation on Small Business Borrowers

Proposals currently before Congress primarily focus on limited expansion of bank services and on closing loopholes which allow institutions to sidestep federal banking regulations. Nevertheless, I believe that events will soon overtake restrictive geographic and product regulation as financial service companies find ways to serve new markets.

Reduced regulation of banks offers a host of opportunities and risks for small business owners. There are, however, three main concerns repeatedly expressed by small business owners: 1) whether local lenders will continue to exist; 2) whether credit will be affordable; and 3) whether credit will be provided in a competitive market.

I would like to discuss all three areas of small business concern, even though particular bills being considered may not at this time provide for the degree of deregulation possible or likely over the years.

1. Will local financing sources continue to exist and make small business loans?

While there may well be, and has already been, significant consolidation in the financial services industry, small local banks can and will survive under less regulation in the future. There is also evidence that the number of new banks being established has been increasing over the years.

NEW BANKS

YEAR	ALL NEW BANKS	INSURED BANKS
1978	178	148
1979	233	204
1980	241	205
1981	250	199
1982	373	317

SOURCE: FDIC DATA

Small, local banks are important, especially in rural areas where they are often partners in many small businesses. They provide financial advice and are able to extend credit to their local clients more knowledgeably than out-of-town banks.

Some small business owners and small bankers fear that increased competition from out-of-state banks and merger activity will result in fewer and larger banks, controlled from the big money centers and uninvolved in local communities. However, New York City banks have been allowed for several years to expand into upstate New York and small banks have continued to compete and survive quite well.[4] The familiarity of the community bank with local customers and the role of a local board of directors give community banks competitive advantages over large "outside" institutions.

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[4]"The New England Experiment in Interstate Banking;" Richard Stynan, The New England Economic Review, March/April 1984.

New banks opening in Connecticut are betting that larger banks created by mergers will ignore small business customers[5] and they intend to fill the void. A state experiment underway in Connecticut permits banks in Massachusetts and Rhode Island to merge across state lines. Despite possible competition from large existing institutions, two new banks have recently opened and the state banking commission believes an additional eight may be approved by June.

Small business borrowers themselves are increasingly turning to out-of-state credit sources for alternative financing. A recent Florida A&M study found that Florida business borrowers were as likely to borrow out-of-state as from in-state banks.[6]

In short, local and national financing alternatives will exist for small business as the range of opportunities continues to expand. To remain competitive in their own industries, small firms will have to seek out the best financial service products and prices from whatever source. Small firms will need to be as creative in managing their financial affairs as they are in managing other aspects of their business.

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[5] Wall Street Journal, March 27, 1984, p. 2.

[6] Florida A & M University, Larry A. Frieder, The Southern Financial Marketplace: The Florida Interstate Banking Study, 1984.

2. Will credit be affordable?

In the not too recent past some community banks were able to provide small business credit below money center rates. They did this by taking money in at regulated rates, a little over 5 percent, and loaning it out at a higher rate that was still below money center rates. Community banks are now competing for deposits with other banks all over the country and with money market mutual funds and other investment vehicles, and their costs have risen accordingly. To the extent that local depositors subsidized local commercial lending, less regulation and a more sophisticated saving public in search of high yields has resulted in increased borrowing costs for some small firms. No bank any longer has this cost advantage of a generous yield spread between passbook deposits and national money rates.

For the small business borrower the newly competitive market which may be more complicated has several offsetting advantages. First, deposits of consumers and small business owners can now earn competitive returns either in a brokerage firm's cash management account or through money market funds offered by banks and other depositories. On the borrowing side the small business can now look to a variety of competitive sources: savings and loans (who can now loan up to 10 percent of their assets for commercial purposes), non-bank (heretofore, non-depository) lenders and others who are unfettered by geographic or product restraints and are providing both new and traditional banking services on an interstate basis.

Deregulation has given birth to innovative financing techniques encouraging more money flows into the capital markets. These changes may be particularly beneficial to small business.

With expanded securities and insurance powers, banks could provide more long-term capital to small businesses by developing loan or equity participation for large investors. Banks could also package and privately insure small business loans as mutual funds.[7]

Recently, one New York City bond insurance underwriter also found a way to provide below prime rate, short-term cash to small firms through the commercial paper market. Through commercial paper default insurance, small but creditworthy companies with annual sales of less than $10 million would be able to issue unsecured commercial paper (or promissory notes) just as large corporations do. Although limited to a very small number of small businesses, it would allow them to tap into a $180 billion commercial paper market and save from one to three percentage points along the way. Since a lot of small banks have lending limits of less than $2 million, the advent of a small issuer commercial paper market could help these banks hold on to growing customers.

3. Will small business owners have access to competitive credit markets?

Beyond the rates charged for credit, small firms are concerned that consolidation in the banking industry will subject them to oligopolistic markets for a wide variety of financial services. However, the following chart from the April 1984 Economic Review of the Federal Reserve Bank of Atlanta provides dramatic evidence that this concern may be over-stated. Competition should make more services available to small businesses and households.

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[7]Comments of Doyle L. Arnold Sr., Deputy Comptroller for Policy and Planning, Office of the Comptroller of the Currency. Washington Financial Reports, Vol. 42, p. 144.

In a comparison of the different financial services offered by different types of institutions in 1960 and then in 1984, the explosion of new offerings is graphically evident, with notable growth in the breadth of services in the non-bank areas. Savings and loan associations, insurance companies, retailers and securities dealers have added a considerable number of traditional banking services to their menus.

Chart 1. Financial Services
1960 and 1984

	Banks		Savings & Loans		Insurance Companies		Retailers		Security Dealers	
	1960	1984	1960	1984	1960	1984	1960	1984	1960	1984
Checking	*	*		*		*		*		*
Saving	*	*	*	*		*		*		*
Time Deposits	*	*	*	*		*		*		*
Instalment Loans	*	*		*		*		*		*
Business Loans	*	*	*	*		*		*		*
Mortgage Loans	*	*	*	*		*		*		*
Credit Cards		*		*		*	*	*		*
Insurance					*	*		*		*
Stocks, Bonds, Brokerage Underwriting		*		*		*		*	*	*
									*	*
Mutual Funds						*		*	*	*
Real Estate				*		*		*		*
Interstate Facilities		*		*		*		*		*

Source:
Federal Reserve Bank of Atlanta, Economic Review, April 1984, p.26.

B. Small Banks in Less Regulated Markets

Small banks face new challenges as well in less regulated markets. The integration of product and service markets that is occurring as barriers to entry are reduced, eliminated or circumvented is placing new and intense pressure on managers of small banks. Many whom I have spoken with welcome it. Like other small business owners, small bankers will survive and prosper to the extent that they pay better attention to customer needs and to quality service.

This does not necessarily mean offering a wide variety of services, although some entrepreneurs may choose that route. Successful market niches offer large opportunities for bankers situated to take advantage of particular expertise or focus.

Those seeking to provide a broad range of services may need to consider alternative means of delivery. Contractual or cooperative arrangements with providers of insurance, real estate, or securities may enable small bankers to provide full services to customers in competition with large banks or retailers involved in the financial services supermarket. The small bank should at least have the option to choose the product markets it will serve; most of its competitors and large banks already enjoy this advantage. More alternatives may be their only hope of remaining competitive with less regulated institutions in the future.

1. Ability of small banks to compete for deposits.

Increased competition places new importance on managing bank costs. Interest rate deregulation has allowed banks and thrift institutions to attract back to their accounts huge amounts of money lost to money market funds when bank interest rates were regulated. This increased cost assures banks of access to funds but squeezes profits significantly. Well managed banks will survive such a squeeze, others will not.

Increased access to new technologies, new product development, alternative capital markets and a lean, competent workforce are all important assets which smaller banks seek to master in a competitive environment.

2. Need for even-handed and reduced regulation for small banks

In banking as in other industries, state and Federal regulation can impose great and disproportionate burdens on smaller competitors. In the banking industry these regulations include capital regulations, bank examination criteria and restrictions on geographic and product market extensions.

We have participated extensively in the Vice President's Task Group on Regulation of Financial Services and before different financial regulatory agencies on several regulatory issues. As regulations are reduced, it is essential that those that remain do not restrict the ability of smaller firms - be they banks, savings and loan associations or others - to take advantage of new powers. A local bank newly permitted to offer a new instrument to better compete with a large retailer or a money center bank can hardly do so if it is subject to more stringent capital asset ratio regulations than its competitors.

Bank examination guidelines that unfairly downgrade bank portfolios with large investments in small business loans need to be reviewed so that small banks are not handicapped at the starting gate by unequal regulation. Classifying loans made by aggressive lenders to small and growing businesses as especially risky is unjustified.

The primary cause of bank failure is fraud, self-dealing and poor management. To the extent that failed banks tend to be located in small towns, they seem also to be located in areas hardest hit by economic downturns, where the inability to diversify geographic or product markets increases risks associated with local economic factors.[8] Overall, however, small banks with small business portfolios are quite often very profitable and no more risky than larger banks.[9]

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[8]Interview with John Downey, Bank Examiner for the Office of the Comptroller of the Currency. Washington Financial Reports. January 16, 1984., p. 163.

[9]James W. Kolari and Donald R. Fraser, "Size and Financial Performance in Banking." Texas A & M University, (Washington, D. C., report prepared for the Office of Advocacy, SBA under Contract No. SB-1-A-00072-01-1, October 1983).

Related Small Business and Small Bank Research

Advocacy has developed research over the years which reflects the significance of small banks and other financial institutions to the local financing needs of small firms and investigates small business capital formation problems. Appendix A summarizes this research.

Conclusion

Deregulation produces structural change, at times quite abruptly, that tends to be accompanied by uncertainty. Most of us operate more comfortably in an environment of structural stability and certainty. Change and uncertainty require greater effort and, while they may also produce greater gains for some, they produce losses for others.

We have found that smaller financial institutions do a good job of providing credit to the small business community. But these institutions must adapt rapidly to survive in more competitive markets. I believe that small business borrowers will be well served by a more competitive environment; this is the source of my previously stated concerns for equitable bank capital regulations, evenhanded antitrust policies, and regulatory structure for the financial services industry that provides realistic competitive opportunities for small financial institutions and their small firm clients. I do not think we can stop the clock on competition in financial services markets nor that we should.

Yours very truly,

Frank S Swain

Frank S. Swain
Chief Counsel for Advocacy

Enclosures

APPENDIX A

SUMMARY OF RESEARCH COMMISSIONED BY ADVOCACY

Completed Research:

1. The Role of the Financial Institutions of a Community in the Formation, Effectiveness, and Expansion of Innovating Companies by Albert Shapero.

   Summary: The research studies the role of financial institutions at the community level in the formation, growth, and effectiveness of innovating companies with a view to developing a body of knowledge to aid those responsible for developing relevant and feasible policy programs and options. The research studies the financing of new ventures in a community with a view to measuring the propensity for financing innovative small companies in different communities.

2. Capital Markets Servicing Small Business: Implications of the Rapid Evaluation of the Financial Services Industry Irving Levenson and Hudson Institute.

   Summary: The study examines major changes taking place in capital markets and in the financial services industry and determines their significance to small business financing. Leveson concludes that (1) Changes in the nature of the financial services industry will impact positively and negatively on small business, but there is no reason to believe that the overall impact will be detrimental to this group. (2) Deregulation of the financial institutions will increase competition and lead to opportunities for improvement in the cost and availability of services for small business. While some firms may cease to serve small business, others may specialize in meeting their needs. (3) Public policy should continue to foster the innovation and deregulation in financial services that is now occurring, since these improvements may help small business. This includes supporting the Federal Home Loan Bank Board's efforts to give thrift institutions the broader powers of commercial lending, factoring, and lease financing.

3. Effects of Size on Bank's Performance, James Kolari and Don Frazer, Texas A & M University.

   Summary: There is little available information on the ability of small banks to remain viable entities and effectively serve the needs of small business under new deregulation activity. The Office of Advocacy commissioned

research to examine costs to both small and large depository institutions of offering money market mutual funds and super-NOW accounts under interest rate deregulation. Preliminary results indicate that smaller rural banks may be less affected by intense competition for deposits than previously assumed, and that NOW accounts, especially the super-NOWs are not likely to significantly erode small bank financial viability. The study suggests that disintermediation from smaller banks to larger banks, or to money market funds, may not occur to the extent expected. Instead, evidence shows that deposits will flow from money market funds to the banks, at least initially. Unfortunately, the largest banks are most able to offer high deposit rates on the new accounts and may benefit the most by them. This may tend to increase size disparities in banking.

The major impact of new instruments and higher cost money may be that banks will require both higher returns and more flexible terms of agreement on loans to hedge greater interest rate sensitivity. In turn, these trends will raise the cost of debt to small businesses in the United States.

4. Cyclical Dynamics of the Small Business Community by William C. Dunkelberg, Purdue Research Foundation.

Status: Phase I received (unreleased conclusions).

Summary of Phase I preliminary DRAFT conclusions: The study examines key issues in the financing, investment and credit behavior of small businesses by using the quarterly National Federation of Independent Business (NFIB) data base

- Small businesses place a high value on lending officers' knowledge of their businesses;

- The single most valued characteristic of the small business-bank relationship was "know you and your business;"

- The frequent small-business borrowers who ranked banks performance as generally good gave them the best ratings in the following characteristics: convenient location, wide range of services, easy access to bank personnel, one person handles credit needs, and reliable source of credit;

- The average interest rate on short-term commercial and industrial loans increased with: loan size, collateralized loans, loans to manufacturing construction and wholesale firms, loans to newer or rapidly growing firms, population size of market, loans made by city and metropolitan banks and loans made by banks in the New England and Pacific Regions, wages, and rates of 3-month Treasury bills;

- NFIB membership responses in 1980 and 1982 do not support a case for allocation of more credit to the small business sector; There is no strong evidence that small businesses receive better service in areas with statewide branching.

5. Two Studies in the Regulation of Small Issues of Securities and Their Investors by A. E. Osborne Associates.

Summary: One study supports the need for greater size definitions in exemptions from reporting requirements and recommends that SEC increase the threshold for firms reporting under the securities laws from the current $3 million in assets and more than the 500 shareholder maximum test up to at least $10 million in assets/revenues.

The second study addresses the SEC's reporting classification system which is based upon the level of assets. It is recommended that alternative criteria such as the number of shareholders, market value of the firm or of individual shareholdings, or trading volume would have a more relevant measurement tool for determining those firms which should meet reporting standards. The dollar investment of small businesses reporting to the SEC is inconsequential when compared to the total investment in the United States capital markets. The benefits afforded by mandatory disclosure for these small companies are inconsequential, whether measured in terms of number of shareholders, market values, or liquidity.

6. An Analysis of Regional Venture Capital Investment Activity and Venture Capital Investment In Need Areas by Norman D. Fast and Stanley E. Pratt, Venture Economics Division, Capital Publishing Corporation.

Summary: These studies use the Venture Economics proprietary data base of financing information to discern the impact of venture capital investment on regional economic development during 1980 and 1981, and document venture investment activity in national need areas for the 10-year period of 1970 - 1980. Regional patterns of venture capital investment are identified.

7. The Securities and Exchange Commission and the Small Business Administration's Office of Advocacy. Phase I Initial Public Offerings of Common Stock: The Role of Regional Broker-Dealers in the Capital Formation Process and Phase II The Role of Regional Broker-Dealers in the Capital Formation Process: Underwriting, Market-Making and Securities Research Activities.

   Summary: The purpose of Phase I of the study was to examine the role of regional broker dealers in assisting corporations to offer their stock to the public for the first time. Phase II examined the underwriting, market-making and securities research support which national and regional broker-dealers provide to issuers of initial public offerings. Research showed that: (a) small and high-technology companies depend overwhelmingly on regional securities firms for initial efforts to raise growth capital in the public securities markets; (b) regional-broker dealers managed 92 percent of all initial public offerings of securities among companies with less than $10 million in annual revenue; and c) regional broker-dealers were found to be the leading market makers providing secondary market liquidity following the initial public offerings of securities of smaller companies.

8. The Impact of the Proposed National Market System on Small and Medium Sized Firms, by Sidney Robbins of Columbia University.

   Summary: This report, part of a 1970 FTC Interagency Agreement, discusses the lack of liquidity for small equity issues and the ways in which an electronic National Market System (NMS) could bring liquidity to equity issues by small businesses. There are some 20,000+ small business issues only quoted through the Pink Sheets, and automation would include benefits such as easier primary and secondary offerings, the ability of principals to market large blocks and valuation of the company for both straight debt and convertible bonds.

Proposed Research:

1. Small Banks in a Changing Financial Environment. There is a continuous concern about the future of small banks in the American economy in the face of ever-changing environment of technological advancement and financial deregulation. Questions frequently asked are, Will they survive? What can they do to assure their survival--networking, cooperative ventures, franchising, boutique banking, or joining the crowd in supermarket banking? The objective of this study is to extend existing completed research to provide an in-depth investigation of major management and financial issues faced by small banks in a new environment.

U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

OFFICE OF CHIEF COUNSEL FOR ADVOCACY

SEP 5 1984

Mr. William Wiles
Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, N.W.
Washington, D.C. 20551

Re: Capital Maintenance
12 CFR Parts 208, 225, and 263
Docket No. R-0526

Dear Mr. Wiles:

Under Public Law 94-305, my responsibilities as Chief Counsel for Advocacy include representing the views and interest of small business before other federal agencies. I am further charged with monitoring the implementation of the Regulatory Flexibility Act (RFA) Public Law 96-354 to assure that small firms and small entities receive appropriate consideration in the regulatory process.

Effective July 26,1984, the Board proposed amendments to its Capital Adequacy Guidelines in a manner consistent with the provisions of capital adequacy under consideration by the Federal Deposit Insurance Corporation ("FDIC") and the Comptroller of the Currency ("Comptroller") in order to establish uniform minimum capital requirements for federally supervised banks. The Board also proposes revised Capital Adequacy Guidelines for bank holding companies. Finally, the Board proposes to issue a regulation setting forth procedures under which the Board may require compliance with the minimum capital requirements contained in the Guidelines.

Earlier this year, I reviewed the Board's Regulatory Flexibility Agenda and submitted comments to Chairman Volcker on the subject of Capital Adequacy Guidelines (letter dated February 24, 1984).

This letter urges the Federal Reserve Board to move toward a uniform standard of capital requirements. Historically, smaller banks and bank holding companies have held in excess of the minimum primary and total capital requirements, while larger multinationals only recently have come into compliance under the same ratios required of regional banks.

Key research undertaken by my office concludes that small bank financial performance for the period 1964-1982 was often better than that of large banks. Results of this research by J. Kolari and D. Fraser of Texas A & M University entitled, "Size and Financial Performance in Banking" lead me to conclude that smaller institutions can and will compete effectively in less regulated environments, if they are treated equitably with the large banks by the Government.

In summary, I agree that a reliable method of capital adequacy assessment is necessary, particularly as it relates to the role capital plays in absorbing "temporary" and "unexpected" losses. However, we urge comprehensive and uniform standards which more accurately reflect bank safety and soundness such as those based on actual history of operations and portfolio health rather than just size of capital.

Yours very truly,

Frank S. Swain
Chief Counsel for Advocacy

JUL 25 1984

Honorable William M. Isaac
Chairman
Federal Deposit Insurance Corporation
550 17th Street, N. W.
Washington, D. C. 20429

Dear Mr. Chairman:

Pursuant to the Regulatory Flexibility Act (RFA or the Act) Public Law 96-304, 5 U.S.C. §601 et seq. this letter responds to the Federal Deposit Insurance Corporation's (FDIC) April 1984, Semi-Annual Agenda of Regulations.

Capital Maintenance (12 U.S.C.1815, 12 U.S.C. 1816, 12 U.S.C. 818, 12 U.S.C 1819, 12 U.S.C 1828), (12 CFR 325)

The April 1984 Agenda proposes forthcoming regulations to establish new FDIC criteria and standards applicable to a bank's capital position. Under current guidelines, the OCC and the Board of Governors of the Federal Reserve System (FRB) established a minimum level of primary capital to total assets of 5 percent for multinationals and regional organizations and 6 percent for community organizations. The FDIC, on the other hand, has established a "threshold" level of 6 percent and a "minimum acceptable" level of 5 percent for the ratio of adjusted equity capital to adjusted total assets for all state chartered, insured, nonmember banks.

On July 9, 1984, the FDIC and the Office of the Comptroller of the Currency (OCC) proposed increasing basic bank capital requirements for all sized banks so that the minimum acceptable ratio of bank capital to assets would be 6 percent. The systemwide decline in bank equity capital ratios was cited as a primary reason. The proposed capital requirement will also eliminate disparities in the treatment of banks regulated by the OCC and the FDIC.

Earlier this year, in response to the Semi-Annual Regulatory Flexibility Agendas of the OCC and the Federal Reserve Board, I recommended to Chairman Conover and Chairman Volcker, respectively, that uniform capital guidelines should be established for large and small banks, (letters enclosed). Otherwise, higher capital ratio requirements for smaller banks would continue to reflect a clear signal to the business

community that small banks are riskier, require more regulation and, therefore, must carry an additional risk premium, which in essence adds to their cost of capital and is unnecessarily restrictive.

As we know, all smaller banks are not per se more risky than large banks. In this regard, it is important that the FDIC and the OCC are jointly moving toward a single standard of capital requirements for all size banks.

Your consideration of these comments and issues is greatly appreciated.

Yours very truly,

FSS

Frank S. Swain
Chief Counsel for Advocacy

Enclosures

cc:

Advocacy - 1012
Reading File - 403 (Premier Bldg.)
Ms. Hollis - 401 (Premier Bldg.)
Mr. Feigen - 401 (Premier Bldg.)
Mr. Bolle - 401 (Premier Bldg.)
Central File - 121
AA/BRHollis:jkb 7/16/84

Ms. Hollis_____

Mr. Feigen_____

Mr. Cadwell_____

Document No. 0645F

U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C. 20416

OFFICE OF CHIEF COUNSEL FOR ADVOCACY

27 JAN 1984

Honorable C. Todd Conover
Comptroller of the Currency
490 L'Enfant Plaza East, S.W.
Room 65
Washington, D. C. 20219

Dear Mr. Conover:

Pursuant to the Regulatory Flexibility Act (RFA or Act) P.L. 96-354, 5 U.S.C. §601 et seq., this letter responds to the October 1983 Semi-Annual Agenda of Regulatory actions offered by the Office of the Comptroller of the Currency (OCC).

The RFA requires the OCC to integrate small business and small entity thinking into all of its regulatory planning. Under RFA guidelines, the OCC must not only consider the entity's size, but there must be systematic reviews of regulations and impact statements to project any cost implications to such small entities before administrative decisions are made to implement Agency regulations. Such analyses are developed through an Initial Regulation Flexibility Analysis (IRFA) at the proposed stage of a regulation and a Final Regulatory Flexibility Analysis (FRFA) at the time a regulation is promulgated in final form.

In this regard, I am concerned that the regulatory impact on small business and small depository institutions is being overlooked by OCC, particularly as they pertain to "interpretative rulings." We believe the OCC should comply with the RFA as to all notice and comment rulemaking procedures, including interpretative rules as well as legislative ones. The primary reason is that, in practical effect, OCC's interpretative rules are often nearly indistinguishable from legislative rules. From the small entity perspective, they are the same. Interpretative rules, like legislative rules, are being relied upon by institutions under your supervision in the same manner as they may rely on the statutory language of the Garn-St Germain Depository Institutions Act of 1982. This reliance in turn factors into the institutions' general operating procedures and small business lending policies.

The October 1983 agenda lists 19 current and projected rulemakings. We consider the following as priority small business/small entity items for Calendar Year 1984.

Definition of Capital (12 USC 84, 2 CFR 7.1100)

This specifically refers to minimum capital guidelines jointly developed by the OCC and the Federal Reserve System to provide a framework for assessing the capital of national banks, state member banks and bank holding companies.

In the agenda, the OCC proposed an analytical framework to evaluate a bank's capital for purposes of capital adequacy. I would be very interested in obtaining copies of research or other materials generated or utilized to support the proposed analytical framework evaluation. An IRFA was not undertaken by reason of the interpretative ruling exemption. However, I believe that capital regulations have a quite significant impact on small financial institutions and that an analysis of those impacts is required by the spirit of the RFA if not its letter.

In December 1981, both the Federal Reserve Board and the OCC published new capital guidelines to achieve consistency, objectivity, and uniformity in regulation. The capital adequacy guidelines are to be applied on a consolidated bank holding basis.

Measurements such as the capital-to-asset ratios are used to analyze the safety and soundness of banks. Under the 1981 guidelines, bank capital ratios were grouped into three classifications by size of institution: multinational, regional and community banks. Where primary capital ratios are the proportion of primary capital to assets, the minimum primary capital-to-asset ratio for community banks (less than $1 billion in assets) was set at 6 percent; for regional banks ($1-$15 billion in assets) the ratio was 5 percent; and, for multinationals (assets greater than $15 billion) guidelines were to be negotiated separately.

Subsequently, these rules have been amended to reflect a 5 percent ratio for multinationals, as of June 1983. This action was taken to stem a "secular decline" in the capital ratios of the multinational institutions.

However, the continued higher capital ratio requirement for smaller banks reflects a clear signal to the business community that small banks are riskier, require more regulation and therefore must carry an additional risk premium which in essence adds to their cost of capital and is unnecessarily restrictive.

Government regulation of capital-to-asset ratios increases a bank's cost of capital when the bank is forced to hold more capital than it otherwise would and if equity capital is more expensive than debt. In this regard, regulatory capital adequacy guidelines can affect the rate of growth of an institution, and may distort investment analysis for purposes of determining a bank's ability to undertake expansion activities.

Uniform capital guidelines should be established for large and small banks. Historically, smaller banks and bank holding companies have held in excess of the minimum primary and total capital requirements. While larger multinationals only recently have come into compliance under the same ratios required of regional banks. Small banks historically have suffered a burden to their growth potential under disproportionate ratios. In this regard, it is important for the OCC to move toward a single standard of capital requirements.

Although the Federal Reserve Board has apparently decided against further narrowing of capital requirements and smaller banking organizations at this time, I urge the OCC to consider carefully the consequences of taking similar action.

Instead of relying primarily on ratios, the OCC's should look for sound, well managed banks, and include an evaluation of the depth and quality of management, the level and quality of earnings and assets, liquidity, interest rate sensitivity, and geographical diversification. Internal planning, operating and control systems should also play a role in evaluation of a bank. These factors have more to do with the financial health and strengtn of a bank than the magnitude of its capital ratio. Particularly if banks choose business practices that keep their assets lower but do not affect their risk, then

asset-based financial ratios, like the capital ratio, become less meaningful both as a regulatory goal and a measure of risk.

Smaller banks are adopting sophisticated management systems, techniques and controls characteristic of larger banks. Additionally, the OCC's improved examination procedures have led to greater success in identifying problem banks in their early stages, which in turn allows for corrective action before the problem gets out of hand.

Key research undertaken by my office concludes that small bank financial performance for the period 1964-1982 was often better than that of large banks. Results of this research by J. Kolari and D. Fraser of Texas A & M University entitled, "Size and Financial Performance in Banking" lead me to conclude that smaller institutions can and will compete effectively in less regulated environments, if they are treated equitability with the large banks by the Government. While it may be that small banks will experience difficulty in coming years, such expectations are not grounded in historical evidence.

In summary, I agree that a reliable method of capital adequacy assessment is necessary, particularly as it relates to the role capital plays in absorbing "temporary" and "unexpected" losses. However, we urge comprehensive and uniform standards which more accurately reflect bank safety and soundness such as those based on actual history of operations and portfolio health rather than just size of capital.

Accrual Accounting (12 USC 1 et seq, 12 USC 9(3)(a), 12 CFR 31 Proposed

The OCC has proposed a new regulation to require the adoption of accrual accounting by all national banks as recommended by the Federal Financial Institutions Examination Council, (FFIEC). The regulation would make uniform the method by which all national banks maintain their financial records. Currently all banks with assets in excess of $25 million and many banks with assets of less than $25 million (approximately 50 percent) routinely maintain internal accounts on the accrual basis. Comments are requested about the cost of conversion to accrual accounting and the annual cost of maintaining the system.

This proposed regulation would be of primary importance to banks with assets of less than $25 million, (47 FR 17069). However, the agenda notice states that increased operating expenses resulting from such an accounting change was not at "the level of significance contemplated by the Regulatory Flexibility Act" to warrant an IRFA.

As you are aware, a constituent agency of the FFIEC, the FDIC, proposed identical regulations for commercial and state chartered mutual savings banks with assets of $25 million or less (47 FR 17264, April 21, 1982). The FDIC also certified that its proposed regulation would not have a significant economic impact on a substantial number of small entities.

In my comments to the FDIC, the Agency's phased implementation of the rule based on size was duly noted. However, I also recommended that a more searching regulatory flexibility analysis be undertaken, and that future regulations be sensitive to higher anticipated costs.

The FDIC withdrew the proposal five months later, on September 27, 1982, as a result of information received from small banks and others showing that the costs of implementing and maintaining a comprehensive system of accrual records would likely outweigh the intended benefits. Although reports of condition and income continued to be required of all banks, including those with assets of less than $10 million as of March 31, 1985.

The need exists for uniform reporting and collection of data particularly in assessing bank risk and predicting bank failures. However, I recommend that your office refer to the FDIC comments which were received as a result of its notice of proposed rulemaking and that the OCC also undertake a full analysis of the regulatory impact of the proposed accounting change on smaller financial institutions.

Other Comments

In mid-1982, I commented to OCC with regard to the agency's portfolio examination procedures and risk assessment of small business loans held in commercial bank portfolios (see enclosed). We asked at that time, that the safety and soundness determination of bank-held, small business asset-based loans not be judged according to the same criteria as loans to larger businesses. We further requested that banks with heavy concentrations of small business loans not be viewed as having asset quality problems by nature of their small business lending, in and of itself. Although small businesses traditionally do not exhibit the same characteristics as large businesses, small business loans, if analyzed and monitored properly, can provide an equal or better investment return than a large business without sacrificing safety or soundness.

The OCC's consideration of these comments and issues is greatly appreciated.

Yours very truly,

Frank S. Swain
Chief Counsel for Advocacy

Enclosure

SBA U.S. Small Business Administration Washington, D.C. 20416

JUN 28 1982

The Honorable C. Todd Conover
The Comptroller of the Currency
490 L'Enfant Plaza East, S. W.
Washington, D. C. 20219

Dear Mr. Conover:

The purpose of this letter is to express the views of the Office of Advocacy of the Small Business Administration with regard to policy issues raised in the adverse decision recently rendered by the Office of the Comptroller of the Currency ("OCC") against the Citizens National Bank of Follansbee ("CNBF").

We do not seek to intervene formally in this matter. Nonetheless, the Office of Advocacy has an obligation to present to you our views concerning the serious adverse impact on small businesses that could occur if the ALJ's opinion is sustained without clarifying the OCC's policies to ensure that loans to small businesses are not unfairly discouraged. 15 U.S.C. Section 634c(4).

OCC Examination Procedures Assessing the Risk of Commercial Bank Loans to Small Businesses

The CNBF proceeding brings into focus a basic lending philosophy of the OCC with regard to asset-based lending upon which small businesses rely in meeting their credit needs. It has been documented that bank supervisors and examiners perceive lending to small businesses as inherently riskier, even though objective data to support this perception are ambiguous. Such adverse perceptions particularly apply to new, relatively undercapitalized small companies, as is well established in studies conducted for The Interagency Task Force on Small Business Finance (Guenther, The Impact of Bank Regulation on Small Business Financing, 1981 (the "Guenther Study"); attached at "A").

In a recent survey of commercial bank lending to small business conducted by The Interagency Task Force on Small Business Finance, 41 percent of the national banks surveyed responded that practices of the examiners affect their small business loan policies. Typical responses indicated that loan classification standards were too strict

and limited the banks' ability to extend credit to small businesses. Glassman and Struck, Survey of Commercial Bank Lending to Small Business in The Interagency Task Force on Small Business Finance, Studies on Small Business Finance, January 1982 (the "Survey"). Survey results also suggest OCC examination procedures with respect to national banks have a more unfavorable impact than procedures followed by Federal Reserve and FDIC examiners, since a smaller percentage (1 percent and 30 percent respectively) of banks examined by those agencies reported that examiners affected their small business loan policies.

It is possible to lend safely and soundly to small businesses by making loans that are backed by the value of pledged assets and by supplementing limited financial information with personal credit supervision. These loans do not have to be undisciplined, unsound or risky. Bankers who are willing to train and recruit the personnel with "hands-on" expertise necessary to make the required appraisals and evaluations can safely conduct asset-based lending to entrepreneurs with good ideas and marketable security or assets which will protect the bank's depositors from risk of loss.

Regulatory judgments as to the safety and soundness of such loans should not be based, as they appear to be now, on the mechanical application of rules of thumb developed for use in judging loans to larger businesses. Instead, examiners should look at each loan on its own terms, and classify it only upon a clear finding that the particular loan exhibits a higher loss potential than non-classified loans. Most small businesses do not have sophisticated balance sheets, often appear undercapitalized, and may exhibit short term cyclical fluctuations. However, thoughtful examination of such loans requires the recognition that such businesses may also exhibit long term stability and that the existence of valuable, marketable hard assets (the full value of which may not appear on the company balance sheet), capable management and a viable business plan, coupled with knowledgeable bank monitoring and a high return can be equally indicative of a safe and sound loan.

Obviously, some loans to small businesses (like some proportion of loans to larger companies, particularly during an economic slump) do raise questions of abnormal risk of loss, and should be classified. Current OCC examination policy, however, seems to expose virtually all loans to small businesses to the possibility of being classified, regardless of the presence of other factors indicating that the loans are sound.

Several factors in the procedures followed by the OCC permit and encourage examiners to implement their institutional bias against loans to small businesses, and particularly against asset-based loans to such companies. These factors include (1) broad discretion given to examiners in criticizing or "classifying" loans which individually do not evidence any loss potential, and (2) the lack of specific guidelines for accurately judging the safety and soundness of small business loans.

The evidence in the Follansbee proceedings suggests that, as a matter of practice, examiners routinely use the "substandard" classification to criticize loans to small businesses which rely more heavily on the value of assets pledged as collateral than on "balance sheet" evidence of an ability to repay. Such substandard classification of loans to small business is encouraged by the examining circular which permits classification of an individual loan even though there is no evidence of loss potential with respect to the particular loan examined. As apparently happened with CNBF, any bank with a heavy concentration of small business loans could have those loans classified substandard without regard to the degree of risk to the individual loans. Any such bank may be viewed therefore, as having an asset quality problem by the regulator and subject to more intrusive supervision.

Since small businesses traditionally do not exhibit the same characteristics as large businesses, it is imperative that the Comptroller make it clear that OCC policies require that examination criteria not be mechanically applied in the context of small business loans. Rather, the Comptroller should require examiners to ascertain the <u>actual</u> risk that such loans pose. Thus, examiners should consider affirmatively such factors as:

- o the actual range of values and saleability of assets securing such loans,
- o the proven business judgment of bank management in assessing both
  - — the capability of the small business customer to achieve its business goals, and
  - — the feasibility of particular business transactions,

- o the extent to which the return on the loan offsets risks taken by the bank,
- o actual performance under the loan,
- o actual monitoring capability and performance by the bank (including on-site inspection) with respect to the loan.

Positive encouragement of safe and sound small business loans should be part of OCC examination policies.

We request the Comptroller to make clear in his decision in the Follansbee proceeding that OCC policies:

- o do not permit the uncontrolled discretion of examiners to classify as substandard small business loans simply because they do not conform to requirements for loans to large business, where the loan is fully secured and the risk of loss with respect to any particular loan is objectively no greater than for any non-classified loan,
- o require examiners to ascertain the actual risk of loss for any small business loan rather than to allow the mechanical application of ratios and standards, and
- o require examiners in evaluating small business loans affirmatively to consider alternative factors, including the value and saleability of assets and the capability of bank management in assessing business risk.

Adequate access to secured, asset-based, commercial bank credit by small business is essential to economic recovery and the maintenance of a healthy economy. The ability of small businesses to develop and grow is a major factor in any effort to pull this country out of the present economic slump. But if small, local commercial banks are discouraged from lending to small businesses, then small businesses will be unable to exploit their opportunities and will be unable to contribute to rebuilding the economy.

We request that the Comptroller consider the adverse effect the examination policies complained of in the Follansbee proceeding will have on the ultimate health of this vital sector of the economy, and revise or clarify the OCC policy to make clear that the nation's small businesses will not be foreclosed from receiving essential credit just on the basis of the nature of their businesses.

Such a clarification of OCC policy would serve the goal of assuring safe and sound banking practices while at the same time permitting bankers to exercise their sound business judgments to provide credit to promising and innovative small businesses. Acting within the marketplace, banks would recognize that the profitability and value of asset-based lending will generate economic growth, employment and capital formation utilizing the commercial banking system.

Sincerely,

Frank S. Swain
Chief Counsel for Advocacy

Attachments

SBA U.S. Small Business Administration Washington, DC 20416

24 FEB 1984

Honorable Paul A. Volcker
Chairman
Board of Governors of the
Federal Reserve System
Marriner S. Eccles Building
Constitution Avenue, N. W.
Room B-2046
Washington, D. C. 20551

Dear Mr. Chairman:

Pursuant to the Regulatory Flexibility Act of 1980, (RFA) P. L. 96-354, 5 U.S.C. §601 et seq. this letter is in reference to the October 1983 Semi-Annual Agenda of the Board of Governors of the Federal Reserve System.

I commend the agency on its past and present efforts to minimize the regulatory burden on smaller financial entities. I will address the RFA issues listed in the Agenda of concern to the Office of Advocacy, as well as, the relationship between smaller providers of credit and small business borrowers.

Current or Proposed Regulatory Actions - October 1983 Agenda

1. Regulation J - Collection of Checks and Other Items and Wire Transfer of Funds (12 CFR, Part 210).

In April 1982, the Federal Reserve Board (Board or FRB) requested comments on a proposal to amend Regulation J to require a depository institution to pay for checks delivered or made available to it on days the institution is closed and the Reserve Bank is open (midweek closings and nonstandard holidays).

The Initial Regulatory Flexibility Analysis (IRFA) noted that, "Of the 1,327 depository institutions that observe midweek closings, Board staff estimates that about one-third (approximately 450 institutions) have deposits of $20 million or less"(47 FR 15349). Further, the IRFA indicates, "...the Board recognizes that in some instances the economic impact on an institution may be significant. However, the Board does not believe that alternatives to the proposed amendment designed to lessen this impact, such as exempting small depository institutions from its coverage, would serve the regulatory aims of the Monetary Control Act (such as equal treatment for all depository institutions and reduction of Federal Reserve Float)."

Subsequently, 232 comments were received on the proposed midweek closings and nonstandard holiday closings. The majority were opposed to the proposal. Most of those opposed to midweek closings were small institutions and their trade associations. One of the key arguments raised by the commenters against both proposals was that the charges would make it more difficult and more expensive for depository institutions to manage their cash positions.

The Board has subsequently adopted a midweek closing policy that is more acceptable to all member banks. Charges for nonstandard holidays have also been reconsidered.

In the future, I recommend the Board exhaust all options available for relief of burdensome regulations, particularly for smaller institutions, before regulations are proposed, and that the affected institutions be consulted as to the potential cost impacts which may occur as the result of implementation of the regulations.

2. Regulation Y - Bank Holding Companies and Change in Bank Control (12 CFR, Part 225).

This proposed change in Regulation Y would revise the rules for determining whether a bank holding company will be permitted to redeem its own stock beyond a minimal amount.

In accordance with the Financial Regulation Simplification Act of 1980 (12 U.S.C. 3521), the Board has undertaken to review Regulation Y, its regulation implementing the Bank Holding Company Act of 1956, as amended (12 U.S.C. 1841 et seq.) and the Change in Bank Control Act of 1978 (12 U.S.C. 1817 (J)), as to fundamental objectives of the regulation, nonregulatory alternatives, costs and benefits of the regulation, unnecessary burdens imposed by the regulation and clarity of the regulation. The Board is to be commended for its efforts in establishing its Regulatory Improvement Project in 1979 to improve the quality of its regulations.

Although the FRB has withdrawn the proposed revision of Regulation Y, the issue has raised several concerns of importance. One important issue was overlooked by the Board. An Initial Regulatory Flexibility Analysis (IRFA) of the proposed revision was not undertaken.

The RFA requires the FRB to integrate small business and small entity thinking into all of its regulatory planning. However, the Board's Notice of Proposed Rulemaking (48 FR 23521, May 25, 1983) indicated that, "none of the proposed changes will have a significant economic impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act (5 U.S.C. 601)."

In response to this proposed revision, the Board received more than 600 comments, mostly from small bank holding companies (BHCs), who opposed this plan to prohibit a BHC from purchasing and redeeming its own securities up to a specified limit, unless the BHC met minimum capital adequacy guidelines. In the case of smaller BHCs, some leeway was given, yet it was proposed that these entities meet two tests: the minimum capital-to-asset ratio guidelines for either the subsidiary bank(s) or the consolidated organization; and, a parent debt-to-equity ratio requirement of not more than 30 percent.

To summarize, a small bank (or BHC) IRFA was not performed; the Board proposed to use, as its redemption standards, its capital adequacy guidelines which are more lenient for larger banks (or BHCs) than for small ones; and, the Board determined that small banks must also be subject to two tests, not one.

The FRB proposed to base its determination of permissible acquisitions of equity securities on capital adequacy standards, as measured by capital-to-asset ratios, which have been established entirely on the basis of <u>size</u> of institution.

I recognize the need for uniform, simplified measurement standards where possible. However, measurements based solely on size when used as a basis for determining regulatory compliance, have in some instances proved particularly burdensome for smaller entities.

I recommend that the FRB seek more equitable measurements or standards to implement its regulations, which would not rely solely on size while providing for the safety and soundness of banking institutions. These measures would include an examination of the individual bank's (BHC's) portfolio health, earnings, and other measures of safety and soundness such as: bank (BHC) structure (independent unit bank versus multi-bank affiliates); location (county

versus urban); asset/liability structure; management posture; level of competition in banking markets; and operational risk including possible diseconomies of scale and diversification beyond the boundaries of management expertise.

Also, in the future, I would expect to see a more thorough small entity analysis of proposed regulatory revisions and a Regulatory Flexibility Analysis undertaken.

Another concern raised by this proposed regulation is the issue of capital-to-asset ratios as a capital adequacy measurement. I will address this issue in the next section.

OTHER COMMENTS:

Capital Adequacy Guidelines: Policy Statement:

The FRB's newly established capital adequacy rules needlessly discriminate against small banks (BHCs) and place these institutions at a competitive disadvantage in increasingly competitive markets. I believe correction of this situation should be high on the Board's agenda.

In December 1981, the FRB and the OCC set capital adequacy standards for national and state member banks. Smaller banks were required to keep higher capital ratios than larger banks, and in particular, the largest multinational lenders were not given specific capital guidelines at all. The latter issue has been subsequently amended, however, the Board chose not to address uniformity in capital regulations with regard to smaller banks.

The current system of capital regulation implies that large banks are less risky than small banks and can be operated with relatively smaller capital levels. While conversely, smaller banks are riskier and require more restricted capital requirements. I do not believe this is warranted. Further, smaller institutions may proportionately lose the most in earnings, in an attempt to comply with these capital regulations.

To the extent that capital levels are artificially high for different classes of banks, I expect to see at least two results. First, those banks with relatively high capital requirements will be at a competitive disadvantage. Second, the businesses and communities served by these banks will suffer as a consequence of this disadvantage.

I recommend that further consideration be given to the disproportionate burden being placed on smaller institutions, and that the cost of increasing the general soundness of the banking system be borne equally by institutions of all sizes.

Regulation G - Securities Credit by Persons Other Than Banks, Brokers or Dealers (12 CFR, Part 207); Regulation T - Credit by Brokers and Dealers (12 CFR, Part 220); Regulation U - Securities Credit by Banks (12 CFR, Part 221):

In July 1983, the Board took final action on changes in margin rules authorized by the Securities Exchange Act. While these rules are final, I believe several issues remain unanswered which cause me to suggest an on-going review of the Board's major rules, and a Regulatory Flexibility Analysis as to the impact which the FRB's margin listing procedures have on small business access to credit.

Under the Securities Exchange Act of 1934, the FRB was granted powers, through Regulations G, T, and U, to limit the amount of credit that may be extended for the purchase of securities. Prior to the passage of this Act, there were no federal restrictions on the extension of credit or margin in the securities markets for securities purchases.

Currently, all stocks listed on a national securities exchange may be margined. However, under current FRB Regulations G, T, and U, many of the 25,000 to 28,000 companies whose stocks are traded in the over-the-counter market (OTC), but not on a national securities exchange, do not qualify for marginality.

The FRB currently publishes a list of OTC stocks which qualify for margin purchase. FRB OTC stock listing criteria requires an average daily trading volume of at least 500 shares or 1,200 or more shareholders of record; a minimum average bid price of $5 per share; at least 400,000 shares outstanding; at least $4 million of capital, surplus and undivided profits; a minimum of three years operating history; at least four market makers; continuous quotations of bid and ask prices; and that the stock has been publicly traded for at least six months.

While many arguments can be raised in opposition to these criteria, just one can illustrate my concerns. The requirement of at least $4 million of capital, surplus and undivided profits means that marginable securities which are included on the FRB list will only be those of larger and more established OTC firms. For those investors who wish to purchase the stock of firms which are excluded from the list of marginable securities, the stock must be paid for in full. The FRB's margin listing restrictions on OTC stock, therefore, can restrict the marketability of non-listed firms' shares.

Various reasons have been given for the control of margin, including investor protection, the control of credit, the control of speculation, and protection of the brokerage firm extending the credit. It is not clear that these reasons for the control of margin should preclude marginability for each of the OTC stocks that are not on the margin stock list. There are some OTC firms that are clearly in a healthier financial condition than some listed firms.

This issue of size discrimination and the ability of larger companies to automatically be marginable by virtue of their listing on a national securities exchange versus smaller OTC companies who must qualify for margin listing according to FRB listing criteria raises three important questions:

First, what is the economic justification for limiting marginability according to the criteria currently followed by the FRB?

Secondly, what are the market effects on OTC firms of being listed, on or delisted from, the FRB margin stock list?

Third, what is the impact on capital formation and the cost of equity capital for smaller firms whose stock is excluded from the list of marginable securities?

I am requesting full consideration of the issues presented, and a small business impact analysis as to the impact of the FRB's current margin listing procedure on small business access to capital.

Data Collection

There remains an inability on the part of the Federal Reserve to adequately collect data on the flow of funds from financial institutions to small businesses. On previous occasions, I have recommended that the FRB develop a statistical data base

to capture flows of commercial and industrial loans by borrower size. Such a step would be instrumental to your efforts in monitoring the flow of funds to small business, and measuring the impact on small business of deregulation for future policy purposes.

For our part, my office recently contracted with the University of Michigan to examine the possibility of estimating aggregate flows by source to subsectors of the small business sector and to explore the feasibility and cost of collecting these data on a regular basis for all United States' small businesses. In January 1984, I also requested research proposals (RFP-84-11-TNA) on the topic entitled, "A Statistical Design for Generating Data on Bank Loans to Small Businesses."

In summary, the Office of Advocacy will do its part to examine cost efficient data collection methods to measure small business credit flows. But the Federal Reserve Board must take the next step to either bring about revisions in existing data collection efforts or to initiate new data collection activity.

Yours very truly,

Frank S. Swain
Chief Counsel for Advocacy

SBA U.S. Small Business Administration Washington, DC 20416

24 FEB 1984

Honorable William M. Isaac
Chairman
Federal Deposit Insurance Corporation
550 17th Street, N. W.
Washington, D. C. 20429

Dear Mr. Chairman:

Pursuant to the Regulatory Flexibility Act (RFA or the Act) Public Law 96-304, 5 USC §601 et seq. this letter responds to the Federal Deposit Insurance Corporation's (FDIC) November 1983 Semi-Annual Agenda of Regulations. The FDIC is to be commended for its RFA compliance efforts to date.

I will comment on three proposed regulations.

Agenda Issues

I. Securities of Insured Nonmember Banks (12 CFR Part 335)

The FDIC has amended its securities disclosure regulations in accordance with the Securities Exchange Act of 1934, which requires that the FDIC issue regulations substantially similar to regulations of the Securities and Exchange Commission (SEC) or publish reasons for not doing so. I suggest that the FDIC add to its agenda and commence soon a proceeding to create a small issuer exemption from reporting for issuers whose assets are less than $3,000,000. This provision would be the same as the small issuer exemption currently provided by the SEC. Separate consideration of this issue is warranted by the potential benefit to small financial institutions.

The FDIC's Notice of Proposed Rulemaking in the general proceeding on Securities of Insured Nonmember Banks (47 FR 53893) indicated that a separate proposal would be forthcoming with respect to the small issuer exemption. This has not yet occurred.

Irrespective of the regulator, from a cost perspective I believe the small issuer exemption is a needed one. Further, in the past I have recommended that the SEC increase the current $3 million assets exemption up to the range of $10 - $25 million in assets/revenues. I would encourage the FDIC to also give consideration to this recommendation, and to use its best efforts to identify and reduce the cost of capital for businesses whose outstanding securities and other indebtedness have a market value of $25 million or less.

One research study commissioned by my office indicated that the significant amount of red tape relief for the large number of smaller firms would more than balance the small number of shareholders immediately affected by any change in the information required.[1]

I believe that uniformity in regulations will minimize the confusion in the securities market, particularly for smaller issues. I recommend that the FDIC propose a small issuer exemption regulation, and also undertake an Initial Regulatory Flexibility Analysis on the subject.

II. Unsafe and Unsound Banking Practices (12 CFR Part 337)

This refers to the FDIC's policy statement of September 3, 1982, in which the Board expressed its opinion that the Glass-Steagall Act does not prohibit an insured nonmember bank from establishing an affiliate relationship with, or organizing or acquiring, a subsidiary corporation that engages in securities activities. The FDIC did a small business analysis of this proposal and I believe the rule should be made final.

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[1]A study by A. E. Osborne and Associates describes a correlation between the number of shareholders, assets, and revenue size of businesses and number of employees. See "The Relationship Between Asset Size and the Number of Shareholders for SEC Reporting Companies," Small Business Administration, Office of Advocacy, NTIS Accession No. PB83-218628.

In 1982, I submitted comments to you in support of insured nonmember banks establishing or acquiring subsidiaries or affiliates in the securities business (comments enclosed). At that time, I recommended that a securities subsidiary or affiliate (or "bona fide" entity) should maintain a separate and independent board, recordkeeping, and other distinct activities so that resulting operations could be more easily measured and monitored as to any safety and soundness impact on the banking operations.

In the interest of small and medium-sized banks, which are important small business credit providers, I support the proposed expansion of permissible banking activities in the securities area which provide an opportunity for these institutions to aggressively compete and innovate in the market place along side larger financial institutions.

III. Activities of Insured Banks (12 CFR Parts 332, 333, and 337)

This Advance Notice of Proposed Rulemaking refers to the real estate, insurance brokerage and underwriting, data processing for third parties, and travel agency activities of insured banks.

If the proposed activities are approved, the FDIC should establish specific guidelines to protect the safety and soundness of the insured bank, providing these guidelines or criteria do not place a disproportionate capital burden on smaller institutions.

The proposed activities warrant the requirement of separate subsidiary or affiliate operations. To the extent possible, the bank's name and reputation should be protected from these other operations. The subsidiary or affiliate should not share a common name with the bank, nor should advertisements make reference to the bank. In all cases, the public should not develop a misconception that monies placed with the subsidiary are of an insured status.

I recommend that the FDIC undertake an Initial Regulatory Flexibility Analysis and examine the proposed activities from two perspectives: first, small and medium-size banks; and secondly, independent, small firms which currently compete in those same markets. This initial analysis should accompany the proposed rule.

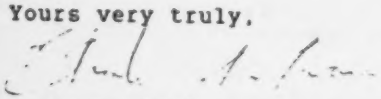
Summary

I am particularly supportive of uniform securities regulations, regardless of the regulated entity, in order to eliminate any confusion among issuers or purchasers in the securities markets.

Given the extensive nature of the proposed activities discussed above, I would generally support such measures. This assumes that they would be uniformly imposed and would protect against potential conflicts of interest involving joint officers, directors or employees, and against potential tying arrangements or indirect agreements which require the acceptance of affiliated financial services. In all cases, I recommend the proposed activities be clearly separate, as to board members, recordkeeping, and all other actions, and subject to the same regulations as independent firms competing in the same markets.

Your consideration of these comments and issues is greatly appreciated.

Yours very truly,



Frank S. Swain
Chief Counsel for Advocacy

Enclosure

NOV 1 6 1982

Mr. Hoyle L. Robinson
Executive Secretary
Federal Deposit Insurance Corporation
550 17th Street, N. W.
Washington, D. C. 20429

Re: FDIC Statement of Policy on the Applicability of the
Glass-Steagall Act to Securities Activities of
Subsidiaries of Insured Nonmember Banks

Dear Mr. Robinson:

This is in response to your request for comments relating to whether there is need for rulemaking to condition, restrict or prohibit insured nonmember banks from establishing or acquiring "bona fide" subsidiaries that issue, underwrite, sell, or distribute stocks, bonds, debentures, notes or other securities. We understand that the Board of Directors of the Federal Deposit Insurance Corporation (FDIC) opined that the Banking Act of 1933, popularly known as the Glass-Steagall Act and codified in various sections of Title 12 of the United States Code, does not, by its terms, prohibit an insured nonmember bank from engaging in the above-mentioned activities. We believe that there is not a need to prohibit such activity and that appropriate requirements on separate securities affiliates will protect the public interest.

The FDIC is to be applauded for its foresight in recognizing the liquidity and competitive needs of those small and medium sized financial institutions which fall under its purview, as the heirs of the Depository Institutions Act of 1982. This major policy consideration moves the country closer towards revolutionizing the financial service industry at the local level. Such initiatives, together with consideration of the Heflin and Glass-Steagall Acts in the 1983 Congressional session, can have a monumental impact on capital and credit access for small business in America.

In 1908, the creation of a securities affiliate was pioneered by national banks as a legal mechanism by which to circumvent barriers to their entry into the securities field. At the end of World War I, every large urban bank was involved deeply in the securities market, having earlier distributed a large volume of war bonds for the Federal Government. By 1930, commercial banks and their affiliates dominated the investment banking field, integrating both the investment and commercial banking structures. The stock market crash and the Great Depression brought on the Banking Act of 1933, which established the FDIC and separated commercial banking from investment banking once again.1/ The Glass-Steagall Act codified the securities affiliate system, but it is unclear why Congress overlooked nonmember banks which numbered more than 9,000 by 1980 and constitute almost two-thirds of all commercial banks.2/

1/ "The Banking System: A Preface to Public Interest Analysis," The Public Interest Economics Center, Stanley W. Black III, Glenn Canner and Robert G. King, February, 1975.

2/ "Commercial Banking and the Glass-Steagall Act, 1982," American Bankers Association, 1982.

It should be noted that what the FDIC proposes, can represent a "two-edged sword" which goes beyond corporation of only nonmember banks. It exposes the core of the financial deregulation issue, moves us towards a more European banking system, and reopens antitrust, securities and banking concerns which could not be resolved in the last session of Congress when Title V, The Securities Activities segment of the Senate bill entitled "Depository Institutions Amendments of 1982," had to be eliminated. These concerns include: unfair competition (tying, captive markets, tax inequities, etc.), conflicts of interest, fiduciary responsibility considerations, and regulatory oversight and consolidation, to name a few.

In this regard, I refer you to the call by Chairman John Shad of the Securities and Exchange Commission (SEC) for a comprehensive review of the changes occurring in the financial services industry through the creation of a one-year task force; a concern which was further highlighted at the successful SEC Conference on Major Issues Confronting the Nation's Financial Institutions and Markets in the 1980's, held October, 1982. It should also be noted that Treasury Secretary Richard T. Regan stated at this conference that Vice President Bush's Task Force on Regulatory Reform could be an effective alternative to the proposed one-year Task Force. I supported a comprehensive review with a particular emphasis on the survival of small, community-based financial institutions in previous testimony before a House Subcommittee on Small Business in May, 1982. At that time, I also addressed those small business issues which must not be overlooked with regard to regulatory restructuring, and the McFadden and Glass-Steagall Acts (Testimony enclosed). I do not believe that these overall review efforts should postpone your efforts to increase the flexibility of small business capital providers.

Your policy statement asks several questions regarding whether the creation of securities subsidiaries or affiliates will impact on the safety and soundness of overall banking activities. Further, you are concerned with whether such securities activities will lead to conflicts of interest, which will be detrimental to the depositor and bank customer. Lastly, you inquire as to how a "bona fide" subsidiary should be operated.

We are of the opinion that it is not inherently unsafe or unsound for insured nonmember banks to establish or acquire subsidiaries or affiliates in the securities business. Nor do we believe that such securities activities pose a safety or soundness problem that is in this day and age materially different from other banking activities. We believe that these securities activities should be permitted for the small and medium sized community banks that have historically provided credit for local small firms. We are concerned, however, that the composite rating system referred to in your policy release may be biased against some of the smaller more profitable banks in our country. We would like to see a composite rating system that will be truly uniform for every sized bank, using a constant capital ratio formula.

Your question concerns potential conflicts of interest involving officers, directors and principal shareholders of the securities subsidiaries or affiliates and the bank in of concern and we would suggest that nonmember banks obtain FDIC prior approval where material relationships involving potential conflicts of interest can occur.

You inquired as to the perceived public harms if insured nonmember banks embark on such securities activities. We believe that the public may have negative preconceptions due to the potential for conflicts of interest and interlocking directorates involving these banking activities as well as pricing and "tying" arrangements between banks and securities entities. However, we further believe that positive perceptions can be created and real protection provided by establishing adequate financial and operating separations between banks and securities affiliates. The public benefit to flow from the availability of full financial services at competitive prices in the local communities of our country will easily outweigh the potential for harm if adequate separations are established.

Your inquiry as to what constitutes "bona fide" entity is significant in view of our previous comments. We believe that a securities auxiliary or affiliate should be required to maintain separate accounting and other records as well as separate meetings with an "independent" board. In all cases it should be operated as a distinct entity whose profits and operations can be measured and reported separately. There is no reason that such a subsidiary cannot have a similar name as the banking operation, as long as a clear distinction is made for the banking customers as well as for the securities investor. Also, the use of common facilities should be under clear contractual arrangements which can be approved and filed with the FDIC. Any other contractual relationships between the bank, its employees, directors or principal shareholders should similarly be filed with the FDIC for their approval.

Finally, you asked about standards for the adequacy of the capitalization of the subsidiary. Capitalization should be defined as permanent capital of the subsidiary or affiliate. Traditional business plan considerations based on projected activities and sources and uses of funds can determine the level of permanent capital needed. Such capital will depend on the type of securities activity proposed and the amount of investment activities contemplated. In your capitalization guidelines, you may also wish to consider the net capital requirements for broker-dealers as established by federal securities regulations.

Conclusions drawn from a February, 1987 report, entitled Studies on Small Business Finance, indicated that most small business bank credit is held by small and medium-sized banks, many of which would be affected by the FDIC's proposed rulemaking.1/ It is in the interest of those institutions which will be most affected, that we reexamine the securities subsidiary issue be examined in a broad context. At the same time we believe that the FDIC can proceed in this rulemaking to fashion restrictions that provide appropriate public protections and without erecting an outright bar to non-member bank securities affiliates.

Your consideration of these comments and issues is greatly appreciated.

Sincerely,

/s/ Frank S. Swain

Frank S. Swain
Chief Counsel for Advocacy

Enclosure

1/ Studies of Small Business Finance," the Interagency Task Force on Small Business Finance, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, the Bureau of the Census, and the Office of Advocacy of the Small Business Administration, February, 1987.

APPENDIX B.—"SIZE AND FINANCIAL PERFORMANCE IN BANKING," BY JAMES W. KOLARI AND DONALD R. FRASER, FINAL REPORT PREPARED FOR THE SMALL BUSINESS ADMINISTRATION

Size and Financial Performance in Banking

Final Report of a Research Project
Performed for the Small Business Administration

by

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Department of Finance
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October 18, 1983

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The authors are, respectively, Assistant Professor and Professor of Finance at Texas A&M University.

ACKNOWLEDGEMENTS

There are a number of persons whose valuable assistance contributed to the completion of this report. Alan Montgomery performed most of the extensive computer programming that this project entailed. Additional programming assistance was offered by John Burgard. Graphics for the figures were done by Tom O'Connell. Numerous individuals at different seminars over the past two years have generously provided comments that have tended to enhance the text of the paper. In this regard, we would also like to thank Dr. Charles Ou for technical counsel given throughout the course of this research. Needless to say, the authors accept full responsibility for any errors that may remain.

Dr. James W. Kolari
Co-Principal Investigator

Dr. Donald R. Fraser
Co-Principal Investigator

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I. INTRODUCTION

Over the last two decades changes in bank structure and competition have periodically evoked concern that the viability of small banks may be endangered. As branch banking and holding company organizations gradually evolved, occasional studies have sought to measure the ability of small banks to compete against larger adversaries in the same geographic region or market. For example, in 1966 Kohn[1] reported evidence regarding small bank financial ratios before and after market entry by a larger and/or branch bank competitor. On the whole, small banks' profitability was unaffected by such new entrants, although deposit growth rates did decline somewhat. Later work by Darnell and Keen[2] indicated that small bank acquisition by a larger, out-of-town bank did not impair the ability of the surviving banks to attract and hold deposits. Furthermore, ratios of balance sheet and income statement items describing banks' capitalization, income, expenses, lending mix, and liquidity were generally unaffected.

Recent legislative changes affecting bank competition have once again drawn attention to the fate of small banks. Both the Depository Institutions Deregulation and Monetary Control Act (DIDMCA) of 1980 and the Garn-St. Germain Depository Institutions Act of 1982 have expanded the asset and liability powers of thrifts. For example, the former

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[1]Ernest Kohn, The Future of Small Banks: An Analysis of Their Ability to Compete with Large Banks, New York State Banking Department, December, 1966.

[2]Jerome C. Darnell and Howard Keen, Jr., "Small Bank Survival: Is the Wolf at the Door?," Business Review (November 1974), pp. 16-22.

legislation enabled thrifts to issue interest-bearing transactions accounts (viz., NOW accounts) to (primarily) consumers and to put up to 20 percent of assets in consumer loans, commercial paper, and corporate debt securities. The latter legislation extended thrifts' powers by permitting them to make commercial loans up to a total of 5 percent of their assets. Additionally, limited transaction money market accounts and no transaction limit Super-NOWs, both requiring a minimum balance of $2,500 and having no interest limit, were approved for all depository institutions effective December 14, 1982 and January 5, 1983, respectively, by the Depository Institutions Deregulation Committee. Further, the Depository Institutions Deregulation Committee eliminated most interest rate ceilings on deposits, effective October 1, 1983.

These regulatory changes as well as other market forces are expected to significantly alter pricing and practices in retail banking. Because small banks have traditionally been most active at the retail level and in some cases have had competitive advantages due to rural locations they potentially may lose the most from the effects of deregulation, the innovative competition from the nonbank, financial services sector, and the rapid pace of technological change.

A number of studies have attempted to <u>forecast</u> the viability and prosperity of small banks within a less regulated financial environment. For example, drawing upon the experience with deregulation in the securities brokerage and other industries, a McKinsey and Company study found a continuing role for small community-oriented commercial banks, though the nature of their services offered to customers might

be altered substantially.[3] In contrast, a second study of the effects of deregulation on smaller banks in Texas was highly pessimistic, forecasting substantial declines in profit margins and negative profitability in a number of situations.[4]

Forecasts of the future structure and competitive environment of the financial services industry would seem to be a useful exercise. Yet these two studies as well as others that have attempted to forecast the future financial structure of the nation are inherently speculative and subject to wide degrees of error. It would seem that the starting point for speculation about the future would be the historical record of financial performance and growth of the organizations that form the basis for the forecasts. It is the purpose of the present study to provide that historical record upon which informed forecasts may be grounded. Such empirical evidence is important in its own right and also may allow for informed inferences about the effects of deregulation on the financial condition of small banks.

There are a number of reasons to expect that the financial condition of commercial banks, as related to their size, during past years may provide useful inferences about the size/financial condition relationship in the future. First, while one of the principal changes associated with financial deregulation is the removal of Regulation Q

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[3]For a summary of this study see: Donald C. Waite III, "Deregulation and the Banking Industry," The Bankers Magazine (January-February, 1982), 26-35.

[4]Management Analysis Center, Inc., "The Impact of Deregulation on Small and Medium Sized Texas Banks," A Report Prepared for The Texas Bankers Association, 1983.

ceilings, in fact the significance of Regulation Q in constraining bank behavior was steadily eroding during the period of this study, especially the latter part of the 1970's.[5] In fact, the liabilities at commercial banks paying unregulated interest rates increased dramatically during the 1960's and 1970's, from 1 percent in 1965 to 50 percent in 1981. Hence, much of the empirical analysis contained in the study is relevant to a period of reduced regulation (and also volatile interest rates) such as appears likely to exist in future years. Second, removal of Regulation Q and the movement of deposit rates to market levels will not necessarily reduce bank profits in the long run once banks have been able to make the necessary adjustments to these changes. Nor will it necessarily affect small bank profits more substantially than large bank profits. For example, in a recent study, Flannery[6] concluded that over the long run most banks will find that deposit rate deregulation will have no major effect on their profits.

More specifically, the present study seeks to review the empirical evidence regarding the financial conditions of small banks from 1964 to 1982, with particular emphasis on differences in financial ratios among

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[5]Money market certificates, for instance, were introduced June 1, 1978 with six-month, minimum $10,000 deposit requirements (reduced to $2,500 January 5, 1983) and yields tied to 26-week Treasury bills. These MMCs accounted for more than 60 percent of all bank time deposits less than $100,000 by mid-1982. Ceiling rates on deposits in excess of $100,000 were deregulated in 1978. Moreover, throughout the sample period banks have increasingly offered implicit interest on deposits in the form of expanded services, branches, electronic facilities, gifts, advertising, and more.

[6]Mark J. Flannery, "Removing Deposit Rate Ceilings: How Will Bank Profits Fare?," Federal Reserve Bank of Philadelphia (March/April, 1983), pp. 13-20.

banks of different sizes. The basic question investigated is whether small bank financial conditions have differed from those of large banks. Both univariate and multivariate data analysis are employed to evaluate this basic issue. In this way recent changes, particularly DIDMCA of 1980, may be evaluated from an historical perspective.

Three studies have recently appeared in the literature that also review small bank behavior. Rhoades and Savage[7] have contrasted small and large banks' financial condition using Call and Income and Dividend reports for the year 1978. Cole[8] and Opper[9] have reported profit ratios and related figures on small banks over the past five years. All of these studies treated banks with assets less than $100 million as small banks. The general conclusion that these studies manifest is that small banks' financial conditions have been satisfactory, if not superior, as compared to larger banks.

There are a number of aspects of small banks' financial conditions that these studies do not address, however. First, none of the studies comprehensively evaluates the financial behavior of small banks in the sense that scattered pieces of evidence are collected for rather short periods of time. A better perspective could be gained by consideration of numerous measures of income and condition over an extended period of time. Second, no overall measures of bank financial condition have been

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[7]Stephen A. Rhoades and Donald T. Savage, "Can Small Banks Compete?," The Bankers Magazine (January-February, 1981), pp. 59-65.

[8]Roger T. Cole, "Financial Performance of Small Banks, 1977-80," Federal Reserve Bulletin (June 1981), pp. 480-489.

[9]Barbara N. Opper, "Profitability of Insured Commercial Banks," Federal Reserve Bulletin (August 1982), pp. 453-465.

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used in previous literature to contrast small and large banks. When assessing bank behavior it is important to consider the combined effect of individual measures since these measures will tend to influence one another. Third, lumping banks with less than $100 million in assets into a single size category may not reveal much about the majority of small banks with asset sizes less than $25 million. These banks may not enjoy the economies of scale that studies have shown exist in the $25-$100 million asset size range. Also, these very small banks may be expected to be affected differently by recent competitive changes due to their different structural and locational characteristics (i.e., rural, independent unit banks). Yet, it is the small, independent unit bank that, according to a recent survey,[10] is most responsive to the needs of small businesses.[11] Hence, more focus on very small banks could provide valuable insights into the prospect of future credit availability to small businesses in the years to come. In the present study an attempt to alleviate these shortfalls is made.

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[10]Peter L. Struck and Lewis Mandell, "Impact of Financial Deregulation on Small Business: Evidence from April 1980," Proceedings of a Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, April 12-14, 1982, pp. 181-193.

[11]A survey of bankers' opinions conducted by the three federal bank regulatory agencies (see Glassman and Struck, 1982 and Glassman, 1982) revealed no significant differences between multi-office and independent unit banks as far as credit availability to small business firms is concerned. Unfortunately, comparisons were not adjusted for size which could influence the results. Another study of Eisenbeis (1975) based on Federal Reserve System's 1955 loan survey data indicated that statewide branching increased credit flows to small, local businesses relative to unit banking or limited branching. However, no significant differences between these types of banks were uncovered in a more recent study by Dunkelberg and Scott (1981). Altogether, these studies cast some suspicion upon the effect of bank structure on small business credit.

Section II of the paper discusses the selection of the sample banks included in the study. Section III provides an analysis of selected financial ratios that proxy the financial condition of the sample banks over the period studied, 1964-1982. The focus of the analysis is on proxies for profitability and risk, though other measures of financial condition are also presented. Section IV reports on the attempt to construct a multi-index model of bank financial condition and to review the time series of this index for small banks over the sample period. Section V provides a brief summary of the findings along with some of the major implications of those findings.

There also are a number of appendixes to the paper that provide additional information on the technical details of the study. Appendix A provides the mean values of each of the financial ratios reported in Section III for different size groupings for each year in the study, 1964-1982. Appendix B provides a description of the results of statistical tests using the General Linear Model for the effects of size on bank financial ratios. Where appropriate, reference is made to these statistical tests in the discussion in Section III. Appendix C provides additional technical discussion on the multi-index model of bank financial performance discussed in Section IV. Appendix D reports on the results of a subsidiary analysis of the basic question addressed in the paper by analyzing within a univariate framework the financial differences between New England banks that did and did not offer negotiable order of withdrawal accounts during the sample period.

It must be recognized that distinctions between "small" and "large" banks are arbitrary to a considerable extent. While a total asset

demarcation line of $100 million is frequently used, it may also be desirable to make more numerous distinctions among banks of different sizes, as was done in Section III of the present paper. Also, even an arbitrary dividing line will change as the value of the monetary unit alters. In any case, the focus of the empirical analysis in this paper is principally upon differences in bank financial ratios as related to bank size rather than on the inherently arbitrary dichotomy between small and large banks.

II. SAMPLE AND DATA

All data was obtained from the Federal Deposit Insurance Corporation's (FDIC) computerized tape series of Reports of Income and Condition for the end of all years from 1964 to 1982. Banks that did not have required data items to calculate numerous performance measures for all years were not considered. This screen yielded 8,523 "survivor" banks (i.e., about 59 percent of the total population). To reduce computer costs of later multivariate statistical analyses reported in Section IV a sample of 1000 banks was chosen from this sub-population. For this purpose a stratified random selection procedure involving the following three factors was used: (1) asset size (i.e., less than $10 million, $10-$25 million, $25-$50 million, $50-$100 million, $100-$300 million, $300-$500 million, $500 million-$1 billion, and over $1 billion); (2) structure (i.e., independent unit or branch bank and holding company affiliated unit or branch bank); and (3) location (i.e., SMSA and non-SMSA/county). A self-weighted random sample was drawn in proportion to the distribution of the 8,523 banks among these 64 different strata.

Three additional banks were included to fill three strata with zero observations. Table 1 summarizes the eventual sample of "survivor" banks. A second and smaller sample of banks was chosen to develop a multi-index model of bank condition. This sample contained 79 failed banks during the period 1970 to 1980. A third sample was developed of New England banks (both those that offered and those that did not offer NOW accounts) in order to explore the implications of financial deregulation with respect to NOW accounts for the financial conditions of commercial banks. An analysis of the data for these banks is presented in Appendix D.

Variables indicative of financial performance were selected from a consensus of variables used in surveillance programs employed by the FDIC, FRS, and OCC to assist bank monitoring efforts in addition to related academic literature cited in Appendix C. A total of 67 financial ratios were calculated for each year from 1964 to 1982. The greatest difficulty was constructing a consistent ratio series over the analysis period. FDIC data items were reclassified and the reporting format substantially changed in 1969, 1976, and 1978 for various reasons by the Federal regulatory agencies. For example, the data item interest bearing notes issued to the U.S. Treasury and other borrowed liabilities was not available in 1964, 1967, and 1968. As a result of these problems a number of conceptually useful ratios had to be eliminated from the time series analysis. The variable set was further reduced according to the following criteria: (1) the variables should be representative of a wide variety of financial characteristics (e.g., capital, profitability, liquidity, etc.); (2) the variables should be easy to

TABLE 1

Sampling Distribution of Banks by Stratification Criteria

Bank Structural Type	Asset Size by Structural Type								
	1 Less than $10 Million	2 $10–$25 Million	3 $25–$50 Million	4 $50–$100 Million	5 $100–$300 Million	6 $300–$500 Million	7 $500 Million – $1 Billion	8 Over $1 Billion	Total
Independent Unit	806(96)	1361(161)	708(82)	273(32)	125(13)	8(1)	2(1*)	1(1*)	3,248(384)
Independent Branch	43(5)	424(49)	775(92)	527(63)	303(35)	40(5)	29(4)	9(1)	2,150(254)
Holding Company Unit	277(33)	675(80)	516(58)	308(37)	159(19)	23(3)	18(2)	16(2)	1,992(234)
Holding Company Branch	22(2)	120(14)	281(33)	264(31)	221(26)	46(5)	55(7)	88(10*)	1,097(128)
Total	1148(136)	2580(304)	2280(265)	1374(163)	808(93)	117(14)	104(14)	114(14)	8,523(1,003)

Bank Location	Asset Size by Location								
	1 Less than $10 Million	2 $10–$25 Million	3 $25–$50 Million	4 $50–$100 Million	5 $100–$300 Million	6 $300–$600 Million	7 $500 Million – $1 Billion	8 Over $1 Billion	Total
County	1023(120)	2028(238)	1653(194)	793(93)	213(25)	12(2)	4(1*)	1(1*)	5,727(674)
SMSA	136(16)	563(66)	605(71)	596(70)	580(68)	103(12)	108(13)	105(13*)	2,795(329)
Total	1159(136)	2591(304)	2258(265)	1389(163)	793(93)	115(14)	112(14)	106(14)	8,523(1,003)

*One of the banks in this sub-group was added to fill a missing cell in order that General Linear Model tests could be performed.

understand (e.g., if equity/assets conveyed the same information as equity/adjusted risk assets, the former was adopted); and, (3) the variables should provide major information on important trends in banking. Necessarily the process of ratio selection is somewhat subjective but this process narrowed the variable set to the 22 financial ratios defined in Table 2.

III. FINANCIAL CHARACTERISTICS OF SMALL BANKS: 1964-1982

As shown in Table 1, and as discussed above, the sample was broken down by total assets into 8 different size groups, ranging from less than $10 million to over $1 billion. In this section of the paper, however, these size groups were collapsed into three groups in order to focus more clearly on the financial conditions of small banks. These three groups are: (1) banks with total assets of under $25 million; (2) banks with total assets of $25-$100 million; and, (3) banks with total assets of more than $100 million. Complete data for all eight size groups for each of the years in the sample period are in Appendix A.

Profitability

Given the earnings problems and resultant mergers and acquisitions among thrift institutions in the past few years, it should be obvious that profitability is crucial to the viability of financial institutions. The return on assets is one of the most commonly used measures of management success in achieving profitability objectives. Figure 1 shows the average net income/total assets ratio, or return on assets, over

TABLE 2

Financial Ratios Used in the Analysis

Variable Number	Variable Name	Variable Definition
1	Return on Assets	Net income/assets
2	Return on Net Worth	Net income minus preferred stock dividends/common stock plus surplus plus undivided profits
3	Equity Capital	Total equity capital plus reserve for possible loan losses/total assets plus reserve for possible loan losses
4	Capital to Assets	Equity capital plus subordinated notes and debentures/total assets
5	Loans	Gross loans/total deposits
6	Adjusted Net Interest	Interest on deposits/total assets
7	Consumer Loans	Loans to individuals/total assets
8	Real Estate Loans	Total real estate loans/total assets
9	Residential Real Estate Loans	Residential real estate loans secured by 1-4 family properties/total assets
10	Commercial Real Estate Loans	Non-farm non-residential real estate loans/total assets
11	Farm Loans	Loans to farmers/total assets
12	Commercial and Industrial Loans	Commercial and industrial loans/total assets
13	U.S. Treasury Securities	U.S. Treasury securities/total assets
14	Liquid Assets	Cash and due from banks plus U.S. Treasury securities plus municipal securities plus other government agency securities plus other securities/total assets
15	Time Deposits	Total time deposits/total demand deposits

TABLE 2 continued

Variable Number	Variable Name	Variable Definition
16	Time Deposits Plus Net Short-Term Borrowing	Time deposits plus net fed funds and net repurchase agreements plus demand notes/total loans
17	Asset Growth Rate	Total asset (t) minus total assets (t-1)/total assets (t-1)
18	Time Deposit Growth Rate	Time deposits (t) minus time deposits (t-1)/time deposits (t-1)
19	Operating Expenses	Operating expenses/operating income
20	Fixed Occupancy Expense	Occupancy expense/operating income
21	Net Borrowings	Net fed funds plus net repurchase agreements plus demand notes/cash and due from banks and U.S. Treasury securities
22	Liquid Assets Minus Short-Term Liabilities	Cash and due from banks plus U.S. Treasury municipal and other securities plus fed funds sold minus total deposits plus demand notes and fed funds purchased/total loans plus bank premises plus other assets

the analysis period for the sample. From this figure it is clear that small banks have generally earned higher returns on assets compared to the other two groups of banks. This trend was not apparent in an earlier study by Gallick[12] on the profitability of small plus medium versus large banks from 1954 to 1974. Also, between 1969 and 1982 $25-$100 million asset banks appear to occupy a distinct middle ground in terms of profitability. This evidence suggests that lumping all banks with less than $100 million assets into a single group conceals much about the relevant financial performance of banks with less than $25 million assets.

Figure 1 conveys two other aspects of earnings that are worth noting. First, small banks' earnings appear more volatile over time than the other bank groups. Earnings of banks with total assets of $25 million or more appeared less volatile. Second, peak earnings among the smallest banks coincide remarkably well with the secular movement of interest rates. Figure 2 illustrates the movement of basic short-term and long-term interest rates over time. A comparison on Figures 1 and 2 suggests that, as asset size in banking decreases, the sensitivity of banks to interest rate swings increases. Statistical tests reported in Table B-1 in Appendix B support these findings as bank size was a statistically significant factor with regard to the return on assets during periods of high interest rates. Flannery[13] has found no relationship

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[12]Edward C. Gallick, "Bank Profitability and Bank Size," Monthly Review, Federal Reserve Bank of Kansas City (January 1976), pp. 11-16.

[13]Mark Flannery, "Market Interest Rates and Commercial Bank Profitability: An Empirical Investigation," The Journal of Finance (December 1981), pp. 1085-1101.

FIGURE 1

Return on Assets

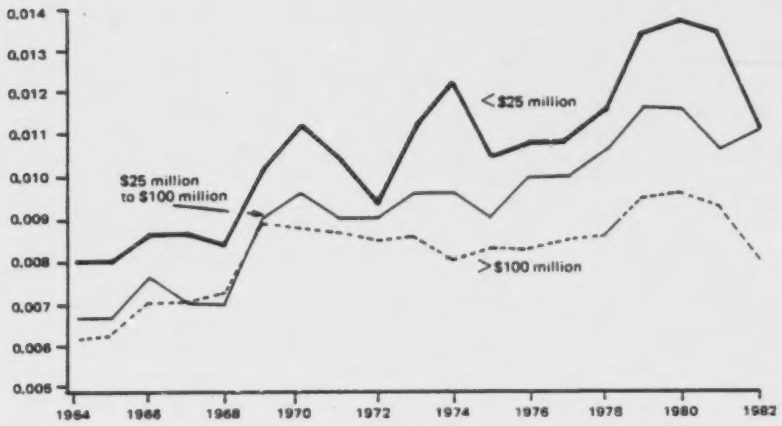
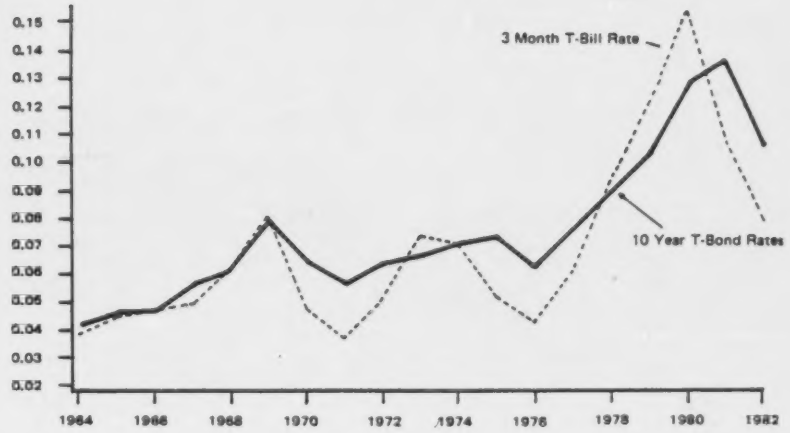


FIGURE 2

Interest Rates Over Time



between the return on assets and changes in market interest rates for the period 1959-78 for banking firms with at least $2.5 billion assets. His statistical evidence appears consistent with our results shown in Figure 1 for banks with $100 million assets or more but is not generalizable to smaller bank organizations.

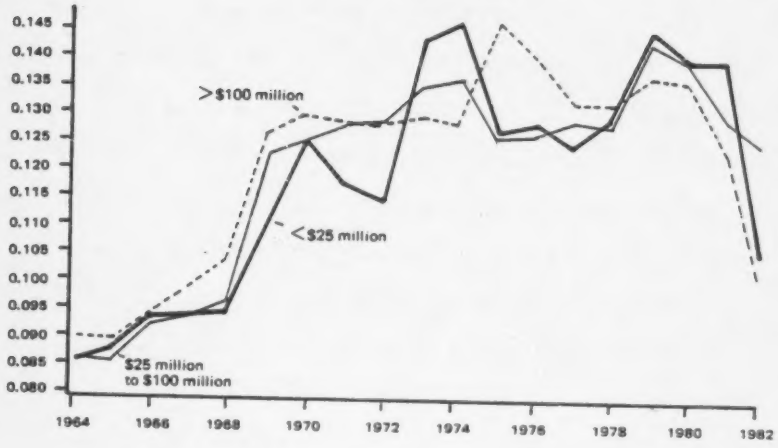
It is also interesting to observe the rising trend in return on assets at the smaller banks throughout the 1964-1980 period. This increase may simply reflect the effect of rising interest rates on asset sensitive organizations. It may also reflect the growing ability of smaller banks to compete in a changing financial environment. In any case, there is little evidence to suggest the inability of small banks to compete with larger banks, at least within the interest rate environment observed in this period.[14] Small banks' return on assets did decline sharply in the 1980-1982 period but this may simply be due to a lag in the rise of interest costs among these institutions.

From the standpoint of the owners of the bank, the return on net worth (defined as net income minus preferred dividends/common stock plus surplus plus undivided profits) is perhaps a better measure of profitability than the return on assets. According to financial theory, bank managers should seek to maximize shareholder weath. Figure 3 indicates that, although shareholder returns follow the same temporal pattern as asset returns, differences in earnings across the three bank size groups are not consistent over time. Large banks tended to

[14] There did appear to be some differences among banks of different sizes (but over $100 million) in terms of return on assets over the sample period, as shown in Appendix Table A-1.

FIGURE 3

Return on Net Worth



have higher returns on net worth from 1964 until about 1972, after which small banks showed a relatively strong increase. Like the return on assets variable, the return on net worth for small banks appears to exceed other sized banks' earnings during high interest rate periods. Also, despite slightly greater volatility among small banks' shareholder earnings, the difference is not as sharp as for asset returns. This finding is not surprising. Indeed financial theory would suggest that differences in returns on equity capital among banks of different sizes would be less than for the return on assets.

Changes in the return on asset and return on net worth ratios over the 1980-1982 period may not be useful indicators of the potential effects of financial market innovations - both regulatory and nonregulatory - on the profitability of banks of different sizes. While there was a substantial reduction in the relevance of deposit-rate ceilings during the period (which might have contributed to the decline in profitability), there was also a marked increase in loan losses due to the effects of the 1980-1982 recessionary conditions on loan customers of commercial banks. Because the latter phenomenon reduced the profitability of banking organizations, separating out its infiuence from that of interest rate deregulation is difficult.

Risk

It is not appropriate to compare returns without simultaneously considering the riskiness of these returns. As discussed above, there is some evidence to suggest greater amounts of earnings volatility at small banks. While earnings volatility is a common way to measure risk,

it is also important to examine underlying factors that may be responsible for earnings difficulties. Here we turn to the capitalization, asset mix and quality, liquidity, and interest sensitivity of the three groups of banks. The following is a brief synopsis of each of these balance sheet factors with respect to risk:

1.	Capital	The main function of bank capital is to serve as a cushion against the risk involved in normal banking functions. As of December, 1981 Federal regulatory agencies define capital to consist of two elements: (1) primary capital--i.e., common and perpetual preferred stock, surplus and undivided profits, contingency and other capital reserves, mandatory convertible instruments and 100 percent of allowances for possible loan losses; and, (2) secondary capital--i.e., limited-life preferred stock and subordinated notes and debentures.
2.	Asset Mix and Quality	The quality of assets is difficult to discern from statements of condition. However, indirect measures such as the mix of loans may be calculated and time series of these ratios analyzed.
3.	Liquidity	The ability to either sell off assets or borrow in the money markets to satisfy temporary cash needs.
4.	Interest Sensitivity	The liability exposure of the bank to relatively high-cost, short-term funds that are not completely matched with similar maturity assets.

Capitalization. Figure 4 shows the equity/assets ratio (adjusted for the reserve for loan losses) over time for the three bank groups. This ratio is an approximation of primary capital, which is the key measure of capital adequacy used by regulators today. Small banks have historically had substantially more equity as a percentage of assets. Statistically, as shown in Table B-3 in Appendix B, size was extremely significant in its association with the equity/assets ratio in all years tested. Figure 4 also reveals that, for the two smaller size groups of banks at least, there was a gradual decline in equity

capitalization from 1964 to 1972. This trend has been reversed in more recent years. Finally, we see that once again $25-$100 million asset banks are readily identified as an intermediate group between the small and large bank size groups. Whether the trends over time and the differences among banks of different sizes reflect management discretion or regulatory pressures is an important though unresolved issue. There was a slight increase in the equity/asset ratio in the over $1 billion asset size group in 1982 (see Table A-3) which may reflect regulatory pressures on this group that had experienced large declines in capital ratio since the 1960's.

Figure 5 gives similar results for the equity plus subordinated notes and debentures/assets ratio. Because smaller banks have limited access to the capital markets, long-term debt affected capitalization as a percentage of assets very little. The ratios for larger banks did increase noticeably, though, causing ratio differences between large banks and smaller banks to narrow.

Asset Mix and Quality. Figure 6 compares the average gross loan/total deposits ratio for different bank size groups. The ratio of loans to assets is a commonly used proxy for risk (with higher ratios indicating greater risk and lower ratios signifying less risk) though the measure is not an unambiguous indicator of risk. Banks with assets over $100 million had higher ratios than smaller banks until the beginning of 1976. The rising level of interest rates from 1975 to 1980 (to unprecedented heights since the 1930s) is one reason for this

FIGURE 4

Equity Capital/Total Assets

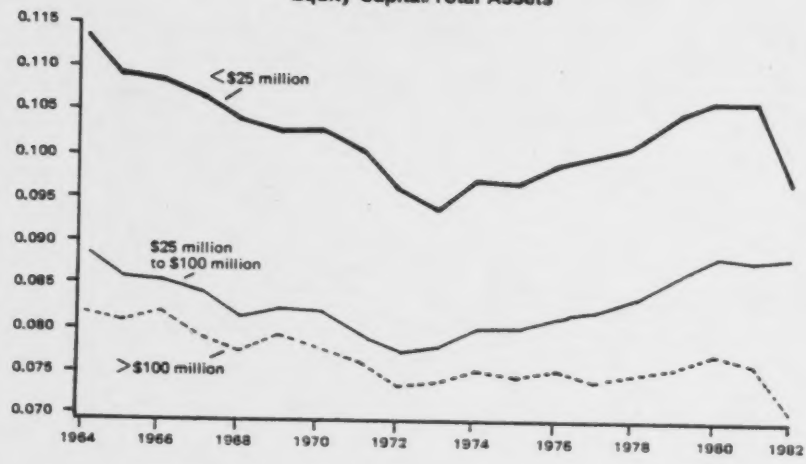


FIGURE 5

Equity Capital Plus Subordinated Notes
and Debentures/Total Assets

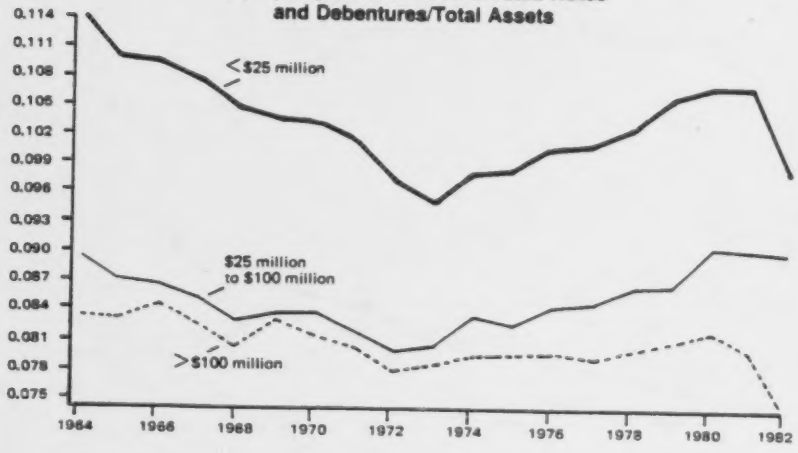


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FIGURE 6

Gross Loans/Total Deposits

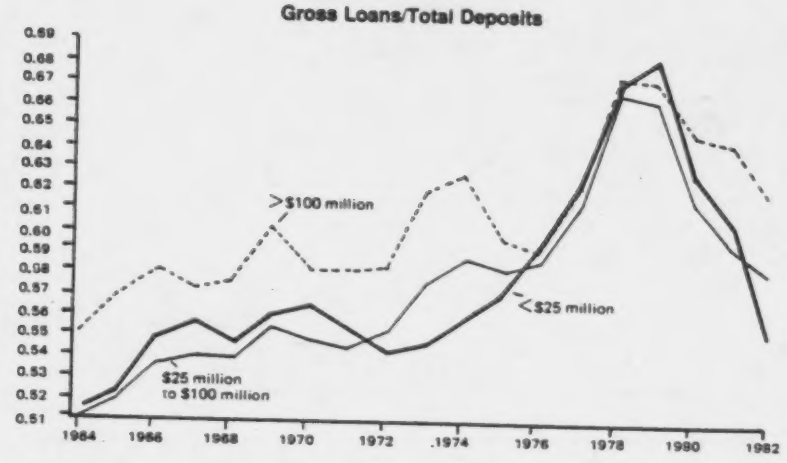
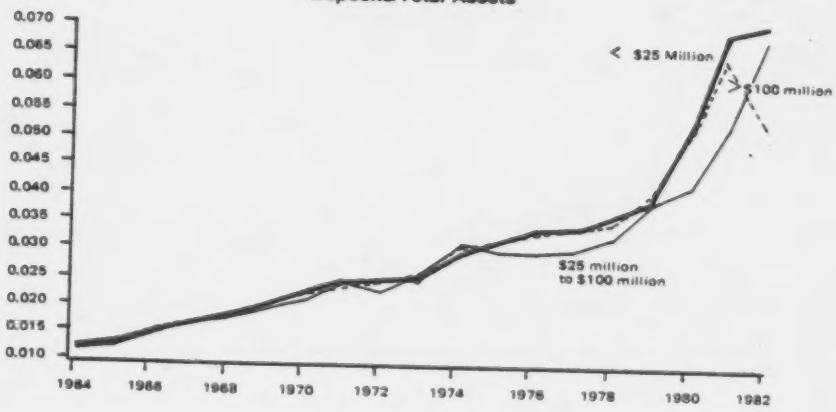


FIGURE 7

Adjusted Net Interest on
Deposits/Total Assets



more aggressive lending on the part of smaller institutions.[15] It may also be that the smaller banks faced more rapidly growing loan demand from their small business clients in the late 1970's as compared to loan demand at the larger banks that generally serve larger customers.

The upward trend in lending was reversed near the end of 1979, especially among smaller banks. This abrupt change may reflect a flight to liquidity in the form of short-term, interest-sensitive assets. As the yield curve inverted in late 1980, banks realigned their asset portfolios to take advantage of relatively high short-term interest rates. The yield curve remained inverted in 1981 prolonging this realignment. These high interest rates affected bank costs of funds as shown in Figure 7. Beginning in 1979 net interest on deposits (adjusted for federal funds purchased and securities sold under agreement to repurchase) increased sharply for all banks, but especially for smaller banks.

The effect of these asset management changes on various loan categories is captured in Figures 8 to 13. Consumer and real estate lending as shown in Figures 8 and 9, respectively, were depressed by recent asset portfolio changes. After a rising trend for smaller institutions and relatively stable pattern for large banks from 1964 to 1975, all sized banks rapidly expanded these kinds of loans until about 1979, after which they decreased just as rapidly.

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[15] Statistical evidence in Table B-5 of Appendix B suggests that significant differences among bank size groups for the gross loan/deposits ratio were typical up until 1975, after which no significant differences occurred until 1981.

FIGURE 8

Consumer Loans/Total Assets

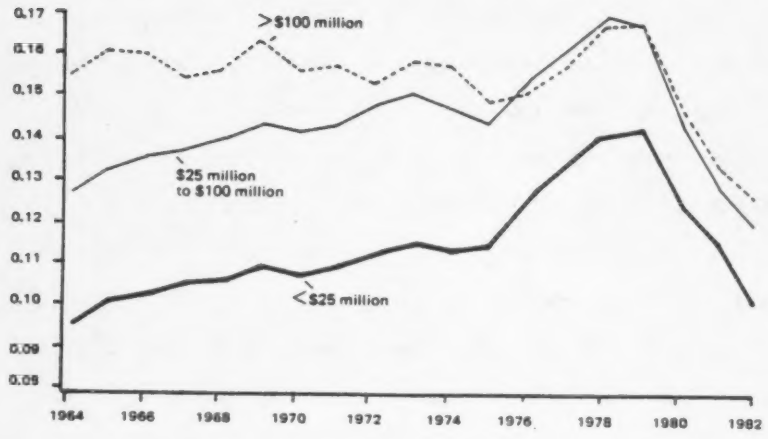
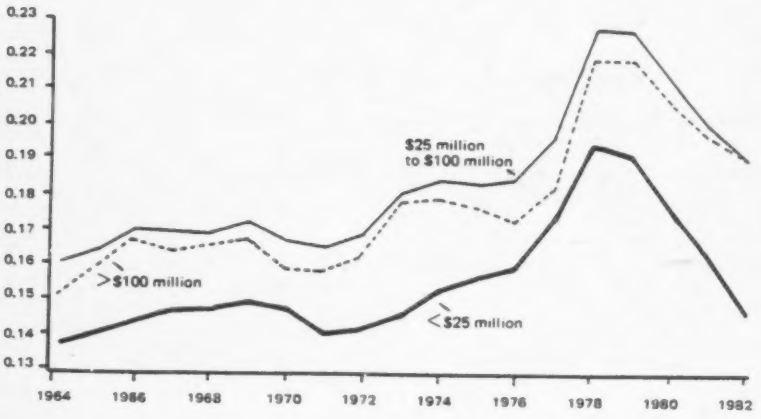


FIGURE 9

Real Estate Loans/Total Assets



Looking at real estate lending more closely, Figures 10 and 11 show that most of the overall trends in real estate lending are attributable to the erratic behavior of residential real estate loans. Commercial real estate has been trending slowly upward for many years (as a percent of total assets) as shown in Figure 11, with some decline in the last few years. Thus, interest rate and economic conditions strongly affect residential real estate but not necessarily commercial real estate. There may be a number of explanations for this phenomenon, though the existence of binding usury laws in residential but not in commercial real estate lending may have been particularly important.

As shown in Figure 12, farm lending remained at a relatively constant fraction of total assets, with the exception of years subsequent to 1979. It appears that small banks have reduced farm lending in response to recent high interest rates.

Finally, Figure 13 illustrates the not surprising fact that large banks devote higher percentages of assets to commercial and industrial loans. Compared to Figure 8 relating to consumer loans, business lending in general increased in 1979 as consumer lending dropped. This may reflect the different rate sensitivities of consumer versus business loans and the volatility of interest rates during the period.[16]

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[16]The net charge-offs (i.e., gross loan losses minus recoveries/gross loans) ratio was calculated but was indistinguishable from size-to-size grouping according to statistical analyses of variance. It appears therefore that net losses on loans for banks of different size categories are not much different. If one considers the fact that larger banks tend to lend more per deposit dollar by purchasing perhaps riskier loans at or near the margin, a potential inference is that larger banks have lower asset quality but make up for it through more competent management. Alternatively, larger banks may attract higher quality loans from big business that stretches their lending capabilities and management

FIGURE 10

Residential Real Estate/Total Assets

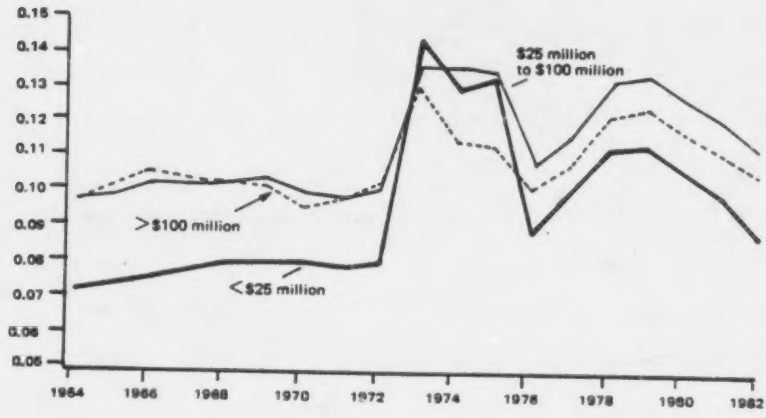


FIGURE 11

Commercial Real Estate/Total Assets

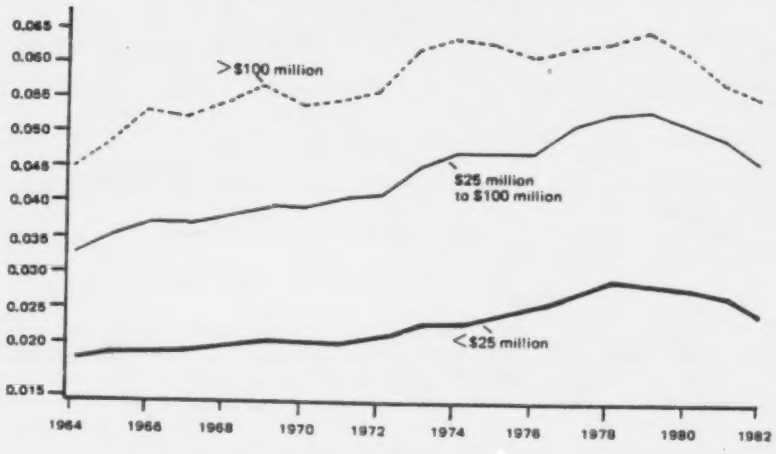


FIGURE 12

Farm Loans/Total Assets

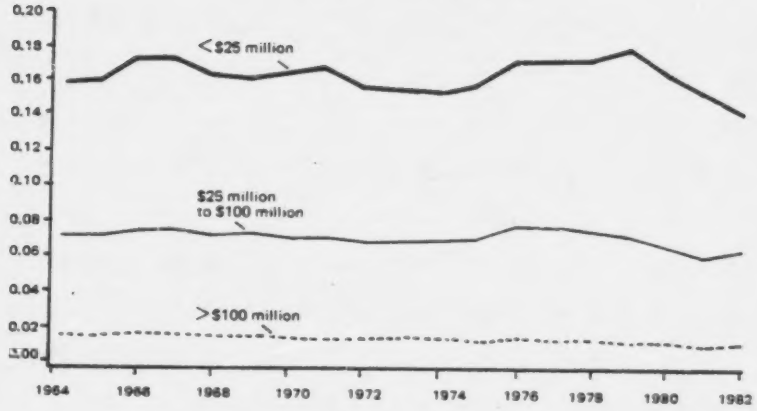
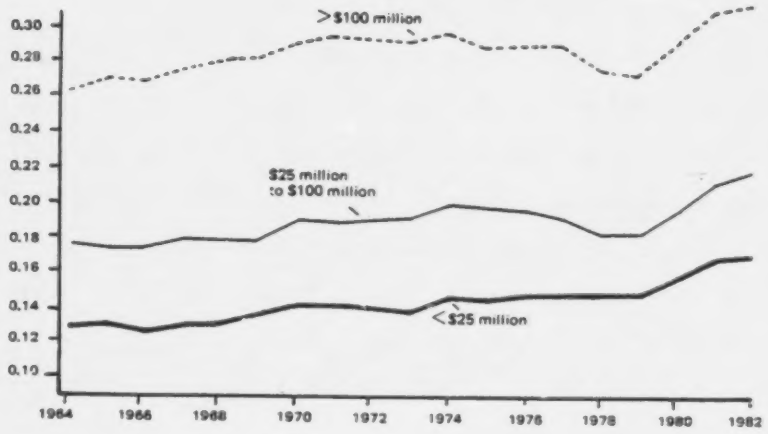


FIGURE 13

Commercial and Industrial Loans/Total Loans



Differences in the relative strength of demand at banks of different sizes may also explain this difference.

Liquidity. Figures 14 and 15 give an historical sketch of asset liquidity by bank size. As expected, the smallest size group of banks maintained significantly greater amounts of U.S. Treasury securities and liquid assets (i.e., cash and due from banks plus U.S. Treasury securities plus local government securities plus other securities) as a percentage of assets than other banks over the 1964 to 1982 period. Banks in the $25 to $100 million asset size range did not differ much, if any, from the largest group of banks. And, asset liquidity has diminished steadily from 1964 until about 1979 reflecting bank portfolio adjustment to changing interest rates.

The general decline in asset liquidity in banking over the last two decades is due in part to the growth of liability management. Table 3 contains data by size and year on the ratio of net borrowings (i.e., fed funds purchased, reverse repos, and demand notes minus fed funds sold and forward repos)/cash and due from banks plus U.S. Treasury securities. The data there are provided for all eight size groups in order to provide more detail on size and liquidity management. Negative results imply an excess cash position, generally indicative of smaller institutions. Through correspondent banking relationships these funds are channeled typically from small banks with excess cash to large banks with cash needs. Although lower asset liquidity on the part of large banks is to be expected, liability liquidity--or the

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([16] continued) resources to the point where, by comparison, smaller banks have higher net losses per unit of risk. Unfortunately, the evidence here is not sufficient to resolve this issue.

FIGURE 14

U.S. Treasury Securities/Total Assets

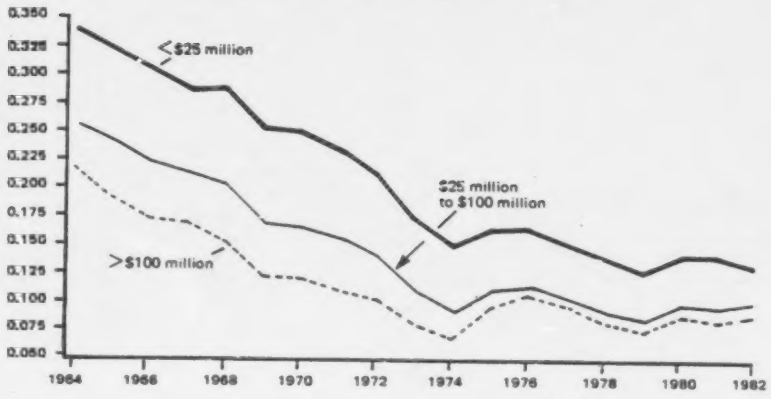


FIGURE 15

Liquid Assets/Total Assets

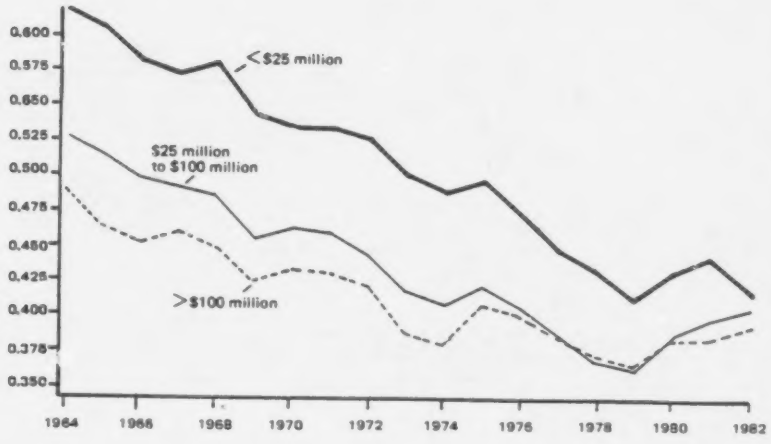


TABLE 3

Net Borrowings to Cash Plus U.S. Treasury Securities

Year	Under 10M	$10-$25	$25-$50M	Asset Size Grouping $50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.011	0.017	0.021	0.024	0.031	0.058	0.054	0.082
1965	0.009	0.013	0.018	0.025	0.024	0.072	0.066	0.071
1966	0.011	0.012	0.021	0.020	0.025	0.047	0.061	0.082
1967	0.006	0.015	0.022	0.022	0.036	0.075	0.065	0.080
1968	0.006	0.006	-0.007	0.011	0.019	0.079	0.048	0.095
1969	-0.098	-0.078	-0.137	-0.096	-0.086	-0.027	0.029	0.065
1970	-0.126	-0.088	-0.122	-0.088	-0.097	-0.006	-0.020	-0.016
1971	-0.152	-0.129	-0.165	-0.122	-0.108	0.006	0.010	-0.046
1972	-0.203	-0.200	-0.199	-0.172	-0.144	-0.062	-0.046	-0.014
1973	-0.400	-0.279	-0.274	-0.233	-0.179	-0.040	0.017	0.056
1974	-0.438	-0.300	-0.316	-0.207	-0.209	0.022	0.147	0.078
1975	-0.337	-0.232	-0.188	-0.131	-0.142	-0.061	0.082	0.043
1976	-0.355	-0.240	-0.244	-0.139	-0.122	-0.086	0.116	0.063
1977	-0.327	-0.258	-0.231	-0.098	-0.076	0.033	0.187	0.067
1978	-0.290	-0.186	-0.143	-0.060	-0.023	0.148	0.271	0.194
1979	-0.360	-0.251	-0.201	-0.183	-0.091	0.175	0.240	0.195
1980	-0.582	-0.385	-0.309	-0.208	-0.063	0.013	0.254	0.286
1981	-0.635	-0.434	-0.356	-0.182	-0.003	0.152	0.152	0.411
1982	-0.481	-0.427	-0.380	-0.170	-0.085	0.227	0.138	0.373

ability to quickly raise needed short-term money market funds--may be as important, if not more so, to effective cash management.

This type of funds management may help further explain the earlier profitability findings. There we observed higher returns on assets at small banks, but less clear differences in terms of return on net worth. Indeed, small banks' return on net worth was generally lower except during high interest rate periods. It may be that larger banks are able to earn a relatively low spread on funds purchased from small banks. This spread management generates dollar returns but tends to lower the percentage return on assets.

Interest Sensitivity. One of the most dramatic changes in banking in the last two decades is the added emphasis on interest sensitive sources and uses of funds. One example of this fundamental change is the balance of time deposits to demand deposits used by banks as shown in Figure 16. In 1964 this ratio was between 0.25 and 0.52, with small banks posting higher ratios. By 1970 these ratios had doubled, and compared to 1970, they more than tripled by 1982 when they ranged between 2.40 and 3.50. Time deposits are obviously much more important today for all banks, both large and small. In this regard, the added emphasis on time deposits has been most prevalent in recent years among small banks as data in Figure 16 (and statistical tests in Table B-15) point to greater differences between small and large banks.

Because fund sources may differ across size categories, the ratio of time deposits plus net short-term borrowings (i.e., the numerator of the ratio in Table 3/total loans) was calculated. Figure 17 gives the results for this ratio. Notice that the differences among banks

FIGURE 16

Time Deposits/Demand Deposits

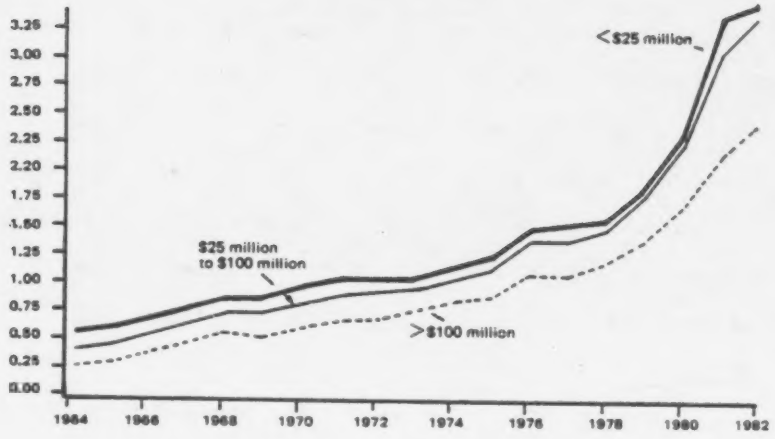
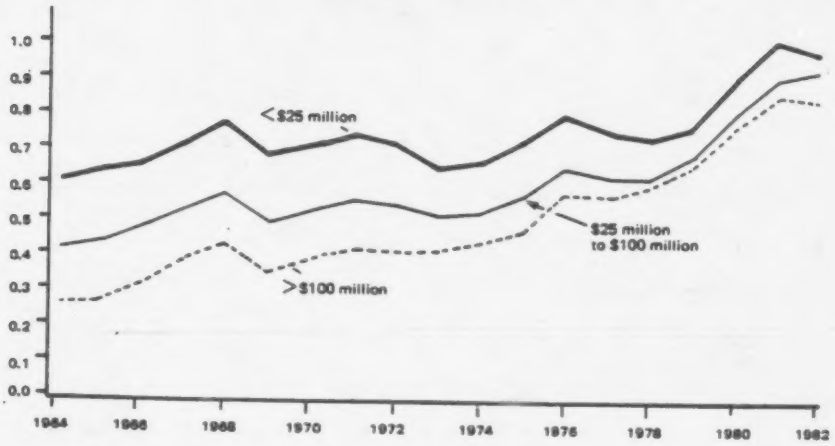


FIGURE 17

Time Deposits Plus Net Short-Term Borrowings/Total Loans



in the three size categories have narrowed substantially from 1964 to about 1978. Statistical tests as reported in Appendix Table B-16 show significant differences until about 1972; however, differences between the years 1974 and 1982 are not statistically significant.

To more closely see the exposure of small versus large banks to interest rate changes, an interest sensitivity ratio was calculated by subtracting short-term liabilities from liquid assets and dividing by non-liquid assets. This measure indicates the degree to which the bank is exposed to adverse movements in interest rates. For example, banks with a low ratio during a period of rising interest rates would be more likely to experience an earnings squeeze as purchased money is rolled over. And, if rates were volatile, a low ratio could cause problems given an incorrect interest rate forecast—viz., the bank borrows long (short) and invests short (long) and interest rates drop (rise). In Table 4 we see that larger banks have more negative ratios than small banks, which means they are more prone to either rising or volatile interest rates. All banks, and particularly small banks, have decreased the imbalance between assets and liabilities in the money market. This evidence simply reflects smaller banks' realignment of asset portfolios towards more liquid assets in recent years. The ability to shift asset structure appears to have had a positive effect on the stability of small bank earnings.

Other Financial Performance Measures

Some other measures that are more akin to economic considerations than financial risk-return trade-offs are the growth rate and the cost

TABLE 4

Liquid Assets Minus Short-Term Liabilities to Nonliquid Assets

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	-0.701	-0.753	-0.786	-0.810	-0.816	-0.835	-0.810	-0.848
1965	-0.706	-0.769	-0.803	-0.823	-0.835	-0.849	-0.826	-0.853
1966	-0.718	-0.783	-0.811	-0.828	-0.835	-0.850	-0.815	-0.857
1967	-0.721	-0.792	-0.817	-0.831	-0.839	-0.850	-0.820	-0.857
1968	-0.725	-0.794	-0.822	-0.833	-0.844	-0.846	-0.816	-0.852
1969	-0.712	-0.783	-0.796	-0.800	-0.800	-0.805	-0.791	-0.818
1970	-0.712	-0.781	-0.791	-0.793	-0.782	-0.798	-0.788	-0.820
1971	-0.707	-0.782	-0.791	-0.790	-0.794	-0.814	-0.789	-0.829
1972	-0.715	-0.789	-0.801	-0.796	-0.804	-0.825	-0.812	-0.842
1973	-0.716	-0.790	-0.804	-0.798	-0.805	-0.830	-0.821	-0.845
1974	-0.710	-0.784	-0.801	-0.795	-0.807	-0.829	-0.810	-0.842
1975	-0.721	-0.785	-0.801	-0.791	-0.800	-0.823	-0.811	-0.832
1976	-0.746	-0.811	-0.828	-0.820	-0.830	-0.359	-0.835	-0.861
1977	-0.758	-0.819	-0.831	-0.831	-0.837	-0.855	-0.841	-0.865
1978	-0.488	-0.545	-0.537	-0.569	-0.570	-0.573	-0.545	-0.692
1979	-0.508	-0.554	-0.578	-0.571	-0.568	-0.574	-0.539	-0.712
1980	-0.504	-0.552	-0.573	-0.570	-0.572	-0.578	-0.542	-0.729
1981	-0.532	-0.585	-0.599	-0.594	-0.597	-0.608	-0.565	-0.750
1982	-0.547	-0.601	-0.615	-0.609	-0.613	-0.626	-0.586	-0.769

efficiency of banks. Figure 18 illustrates the average asset growth rates--i.e., total assets (t) minus total assets (t-1) divided by total assets (t-1)--for the three bank size groups. The results are mixed such that no bank group dominates any other. This finding is confirmed by a general lack of statistical significance of size as shown in Appendix Table B-17.

Another important measure of expansion potential is the deposit growth rate, defined in the same way as the asset growth rate. Figure 19 compares time deposit growth rates of different bank size groups. Since about 1969 the smallest and largest bank groups' growth rates follow one another very closely. Banks in the $25 to $100 million asset range behaved differently, however. Periods of rising interest rates were generally marked by rapid increases in time deposit growth rates at these banks, well in excess of those at other banking institutions.

The previous results on the ability of small banks to earn competitive profits and maintain healthy growth rates relative to larger banks raises the question of operating efficiency or economies of scale. A priori, if one believes there are substantial economies of scale in banking, these results are contrary to expectations. Numerous studies[17]

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[17]For example, see the following studies for discussion and further citations:

George J. Benston, "Economies of Scale and Marginal Costs in Banking Operations," National Banking Review (June 1965), pp. 507-549.

Frederick W. Bell and Neil B. Murphy, "Costs in Commercial Banking: A Quantitative Analysis of Bank Behavior and Its Relation to Bank Regulation," Research Report No. 41, Federal Reserve Bank of Boston (1968).

FIGURE 18

Asset Growth Rate

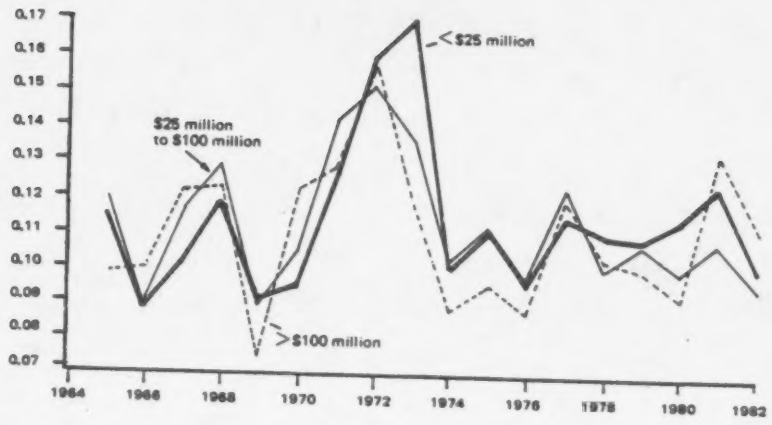
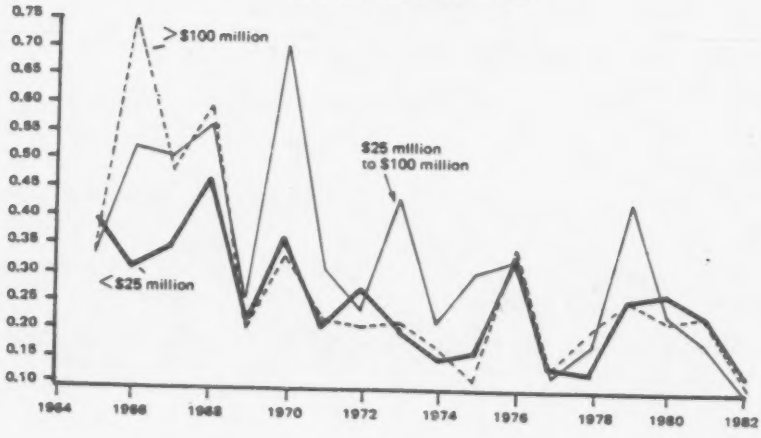


FIGURE 19

Time Deposit Growth Rate



on the subject of scale in banking, however, indicate that size is not of major importance in influencing operating costs. As Benston, Hanweck, and Murphy[18] found upon analyzing functional cost data from 1975 to 1978, the minimum average cost for banking offices was in the $10 to $52 million deposit range. This suggests that the smallest and largest bank size groups in the present study should be at a cost disadvantage relative to the intermediate group with $25 to $100 million assets.

The total operating expenses/total operating income ratio gives some perspective on the ability of management to generate earnings from assets while simultaneously keeping costs down. Figure 20 shows results that tend to confirm the Benston, Hanweck, and Murphy findings. Since about 1970 the intermediate group of banks had lower operating expenses per unit of income than banks in smaller and larger groups. Appendix

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([17] continued)
William A. Longbrake, "Differential Effects of Single-Plant, Multi-Plant, and Multi-Firm Organizational Forms on Cost Efficiency in Commercial Banking," Working Paper No. 74-7, FDIC (1974).

Alan S. McCall, "Economies of Scale, Operating Efficiencies, and the Organizational Structure of Commercial Banks," Journal of Bank Research (Summer 1980), pp. 59-72.

These studies have differed considerably in terms of the measurement of bank output, ranging from the use of a single index to measure diverse services to the assessment of each bank product line independent of others. Also, structural factors such as holding company affiliation and branching have been considered in various ways. In view of recent deregulatory trends altering bank structure and the nature of everyday bank operations, the issue of economies of scale is sure to continue to attract attention.

[18] George Benston, Gerald Hanweck, and David D. Humphrey, "Scale Economies in Banking: A Restructuring and Reassessment," Graduate School in Management, University of Rochester, Working Paper Series No. AEM8201 (November 1981).

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FIGURE 20

Operating Expenses/Operating Income

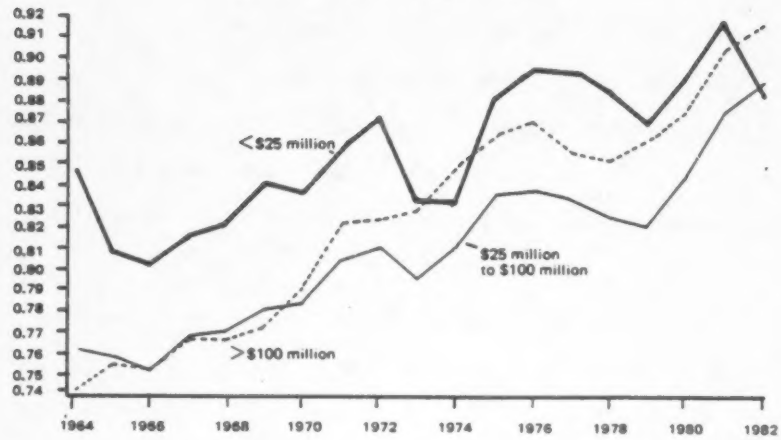

FIGURE 21

Fixed Occupancy Expenses/Operating Income

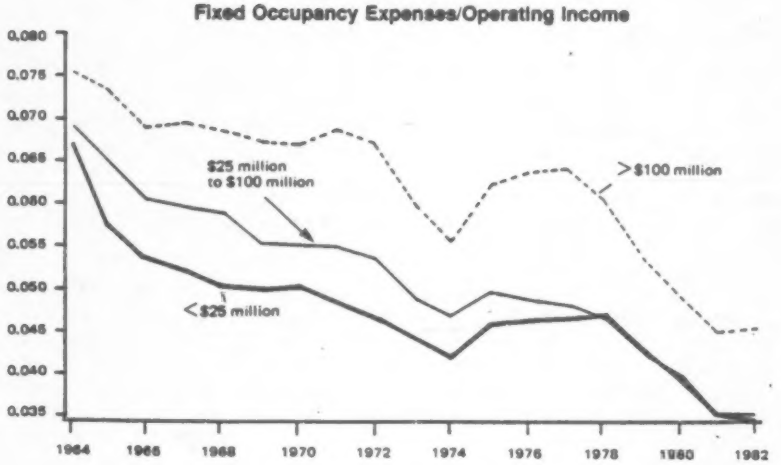

Table B-19 suggests these differences tended to be statistically significant.[19]

How did these differences and trends arise? First, as shown in Figure 21, all three bank size groups have been reducing fixed occupany expenses, including bank premises and furniture and equipment, as a percent of operating income, but banks in the $25-$100 asset range reduced them most in the mid-1970s and small banks have been the most successful at reducing fixed expenses in 1982. Second, other data reveal that medium-sized banks have consistently had lower salary and employee benefits plus miscellaneous expenses since about 1970.

Figure 21 also implies that the escalating use of electronic facilities has reduced the costs of brick and mortar in banking. Increased competition from nonbank, financial companies has put pressure on banks to innovate further in this regard. From the evidence in Figures 20 and 21, though, small banks appear capable of trimming operating budgets to meet competitive challenges.

IV. A MULTI-VARIABLE INDEX MEASURE OF BANK FINANCIAL CONDITION

As early as 1938 Secrist[20] recommended that multivariate statistical techniques be tested to see if they improve upon his unsuccessful attempts to forecase bank failure with individual financial ratios. The basic premise is that several predictor variables acting in concert

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[19] In 1982 the operating expense/operating income ratio actually increased with size. This evidence further supports the notion that economies of scale in banking are negligible.

[20] Horace Secrist, National Bank Failures and Non Failures: An Autopsy and Diagnosis, Principia Press, Bloomington, IN, 1938.

should outperform any individual measure of bank performance in terms of describing relative bank condition. However, this procedure is not without obstacles. For example, Grady and Kyle[21] have observed that differences in bank management, structure, and other factors may alter the admixture of independent performance measures. Further, variable selection may be a problem because, as Eisenbeis[22] has pointed out, even if a variable is an excellent measure of financial performance on a univariate basis, it may be less than adequate when aggregated into a composite score by multivariate methods.

These criticisms have not been serious enough to impede federal regulators from implementing such composite scoring methods to measure bank soundness. Both the Federal Reserve Board (FRB) and the Office of the Comptroller of the Currency (OCC) employ multivariate models of bank condition as early warning systems for impending problems and/or failure. The FDIC also operates a multiple variable system to monitor bank condition between examinations but does not form composite scores from the variable set.[23]

Almost all previous studies of overall bank condition (see Appendix C for literature citations) implicitly assume size is unimportant

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[21]Duane B. Grady and Reuben Kyle, III, "The Simultaneity of Bank Decision-Making, Market Structure, and Bank Performance," The Journal of Finance (March 1979), pp. 1-18.

[22]Robert A. Eisenbeis, "Pitfalls in the Application of Discriminant Analysis in Business, Finance, and Economics," The Journal of Finance (June 1977), pp. 875-900.

[23]For an overview of bank early warning systems' conceptualization and development see: Joseph F. Sinkey, Jr., Problem and Failed Institutions in the Commercial Banking Industry, Jai Press, Inc., Greenwich, CT, 1979, Chapt. 4.

by controlling for size in the sampling process. Korobrow, Stuhr, and Van Wicklen[24] tested size as a factor influencing bank vulnerability in the Second Federal Reserve District and found no significant relationship. These findings are not applicable to nationwide inferences however.

The most widely-used method for aggregating financial performance measures is multiple discriminant analysis (MDA). MDA has gained considerable favor in the academic literature due to its successful ex post ability to separate failed and nonfailed firms prior to the failure event.[25] Unfortunately, the basis for specification of an appropriate MDA model(s) is more an empirical than theoretical judgment. Because the configurations of inter-relationships among financial variables are complex, it is not obvious what variables sets should be used to measure overall bank performance.

Our approach to this problem is to consider a variety of MDA models involving alternative combinations of variables. These models are then applied to a sample of 79 failed banks during the years 1970 to 1980 and 1003 "survivor" banks used in the preceding sections. Banks were classified by each model according to different profiles of financial variables. More importantly, a probability of survival ranging from

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[24] Leon Korobrow, David P. Stuhr, and Daniel Martin, "A Nationwide Test of Early Warning Research in Banking," Quarterly Review, Federal Reserve Bank of New York (Autumn 1977), pp. 37-52.

[25] For a complete exposition on alternative theories of bankruptcy and empirical evidence regarding the forecasting ability of different statistical techniques see: James Scott, "The Probability of Bankruptcy: A Comparison of Empirical Predictions and Theoretical Models," Journal of Banking and Finance, Vol. 15 (1981), pp. 317-344.

zero to one was calculated for each survivor bank for all MDA functions. These probabilities represent overall measures of bank financial condition which may then be comparatively analyzed over time and by size group. Appendix C contains a more in depth description of the models, sampling procedures, and statistical methods.

Table 5 shows the average probabilities of survival for each year from 1969 to 1979 based on the alternative MDA models using quadratic decision rules. Except for Model II, F tests for the equality of mean probabilities over these years were insignificant. Model II's significant F test may be attributed to the relatively low average probability in 1976. Assuming this result to be an outlier, we can infer that overall bank performance did not change greatly from year to year. Thus, we do not expect that temporal effects of the business cycle will affect tests of differences among banks of different asset sizes.

Due to these findings average probabilities for all years were pooled. In Part A of Table 6 the pooled results for different sizes groups are shown. Our factor model gives higher probabilities of survival on average for smaller banks and tends to give progressively lower scores as size increases. The FDIC and OCC models give mixed results with most size groups rated fairly well, excluding the $300 to $500 million and over $1 billion asset size banks. Lastly, the FRB model rates all bank size groups very highly, but the $300 to $500 million size group is distinctly lower compared to the other groups.

Part B of Table 6 breaks average probabilities of survival down by bank structure and location. The factor model rates independent and county (nonSMSA) banks higher than holding company affiliated and

TABLE 5

Average Probabilities of Survival
by Year and MDA Model

Year	n	I-Factor	II-FDIC	III-FRB	IV-OCC
1969	89	.9778	.9910	.9975	.9696
1970	63	.9854	.9966	.9999	.9923
1971	15	.9470	.9339	1.0000	1.0000
1972	76	.9351	.9655	.9977	.9965
1973	51	.9714	.9472	.9999	.9616
1974	152	.9600	.9543	.9866	.9929
1975	203	.9742	.9756	.9944	.9848
1976	63	.9585	.8600	.9681	.9703
1977	63	.9658	.9282	.9998	.9828
1978	127	.9219	.9155	.9882	.9721
1979	101	.9297	.9485	.9797	.9687
F-Value[a]		1.21	3.17	0.94	0.77
p-Value(two-tail)		.2794	.0005	.4961	.6561

[a] F statistic to test the null hypothesis that all years' average probabilities of survival are equal.

TABLE 6

Average Probabilities of Survival by
Bank Size, Structure, and Location According
to Alternative MDA Models

A. Average Probability of Survival by Bank Size

	Asset Size Grouping							
MDA Model	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500-$1B	Over $1B
I-Factor	.9851	.9720	.9784	.9415	.9605	.8309	.7040	.4456
II-FDIC	.9206	.9649	.9694	.9491	.9814	.7873	.9341	.6228
III-FRB	.9924	.9868	.9966	.9932	.9888	.9277	.9999	.9961
IV-OCC	.9769	.9814	.9925	.9757	.9902	.8571	.9999	.9733

B. Average Probability of Survival by Bank Structure and Location

	Organizational Structure				Location	
MDA Model	Holding Branch	Holding Unit	Independent Branch	Independent Unit	County	SMSA
I-Factor	.9304	.9350	.9585	.9771	.9698	.9310
II-FDIC	.9415	.9430	.9586	.9555	.9510	.9532
III-FRB	.9976	.9865	.9932	.9898	.9915	.9898
IV-OCC	.9719	.9887	.9835	.9751	.9835	.9751

SMSA-located banks. The FDIC model obtained similar structural findings but SMSA banks differed little from county banks. Finally, the FRB and OCC models do not reveal any obvious trends concerning bank structure or location.

Further breakdowns of average probabilities by bank size grouping and either structure or location were made but no clear trends could be discerned. Thus, it appears that the multivariate results regarding overall measures of bank performance suggest that smaller banks are not any more or less viable than larger banks. This conclusion also seems reasonable given the mixed univariate findings.

V. CONCLUSIONS AND IMPLICATIONS

The financial performance of banks in the 1960's, 1970's, and early 1980's but particularly in the period since the early 1970's should provide useful inferences about the ability of banks in general and small banks in particular to cope with rapid changes in regulation and innovations in the financial marketplace. During this period the percentage of liabilities paying market rates of interest rose dramatically, increasing from almost zero in the mid 1960's to about 50 percent by 1981. Also, interest rates became much more volatile (and rose to historically unprecedented levels) in the 1970's and 1980's, reflecting the greater underlying volatility of the economy and changes in Federal Reserve operating techniques. These rapid changes placed great strain on the management of commercial banks. Yet the data analyzed in this report suggests that both large and small commercial banks were able to deal effectively with these changes.

While any attempt to summarize the results of an extensive empirical analysis is subject to the error of over-simplification, the following observations distill some of the important findings of the study.

(1) Both large and small banks were able to maintain their return on assets and return on equity during the period studied. They were able to achieve satisfactory profitability despite a substantial increase in the share of their liabilities paying market rates of interest and despite high and volatile interest rates and an unstable economic environment.

(2) The financial performsnce of small banks in the period from 1964 through 1982 was quite similar to large banks. Small banks were able to earn a return from their assets that was comparable to that of larger banks and often greater. The profitability of small banks did vary with interest rate conditions, as did the profitability of large banks, though the effect of fluctuating interest rates appeared relatively minor. Both small and large banks appeared able to alter their portfolio to compensate for volatile interest rates, a finding that is in sharp contrast to the experience of the savings and loan industry during the period. While specific financial ratios did vary with size of bank, the general picture that emerges from the analysis is one more of similarity than of differences.

(3) A multiple discriminant model analysis of the probabilities of failure of small versus large banks did not produce any evidence that small banks are more risky than large banks nor that the failure probabilities of small banks has increased over time. It appears that small

banks, taken as a group, are neither more nor less prone to failure than large banks. This finding is especially relevant for policy issues concerning capital adequacy and other regulatory issues pertaining to small banks.

(4) The future viability of small banks in a deregulated financial environment has recently been the subject of intense discussion. Such discussion is often based on speculation and emotion rather than facts. A thorough analysis of the financial performance of small banks in the 1964-1982 period (one of highly volatile interest rates and rapid financial innovation) provides no evidence that small banks will be unable to compete in coming years. As discussed above the financial performance of small banks in past years has been comparable to large banks and often better. The financial performance of small banks has been comparable to large banks despite the erosion of Regulation Q deposit rate ceilings over the period and the existence of extremely volatile interest rates. Moreover, the experience of New England banks with NOW accounts (as revealed in Appendix D) does not suggest that this type of transaction account will have a strongly negative effect on the viability of small banks. While it may be that small banks will experience difficulty in coming years, such expectations are not grounded in the historical evidence. Small banks in the future may (and probably will) be quite different than small banks in the past. Yet the historical evidence does not suggest that small banks will be unable to survive in a changing economic and financial environment.

It must be recognized, of course, that the understanding and explanation of bank financial condition is a complex process, subject

itself to potentially large error. Also, given the great degree of change that has recently occurred in the financial system and that may accelerate in future years, what has been true of the past may not be true of the future. For example, an acceleration of financial innovation could temporarily (but probably not permanently) reduce the profitability of both small and large banks. As such, these findings (as with all empirical evidence) must be interpreted cautiously and within the inherent limitations of data and technique.

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APPENDIX A

This appendix provides the mean values for each of the financial ratios reported in Section III. Ratios are given for eight bank asset size groupings and all years studied, 1964-1981.

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TABLE A-1

Return on Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.008	0.007	0.007	0.006	0.006	0.007	0.006	0.006
1965	0.008	0.007	0.007	0.006	0.006	0.006	0.007	0.007
1966	0.008	0.008	0.008	0.007	0.007	0.006	0.008	0.007
1967	0.008	0.008	0.007	0.007	0.007	0.007	0.007	0.007
1968	0.009	0.007	0.007	0.007	0.007	0.007	0.009	0.007
1969	0.010	0.009	0.009	0.009	0.009	0.008	0.009	0.009
1970	0.011	0.010	0.010	0.009	0.009	0.007	0.009	0.009
1971	0.009	0.010	0.009	0.009	0.009	0.007	0.008	0.009
1972	0.008	0.009	0.009	0.009	0.009	0.007	0.007	0.008
1973	0.011	0.010	0.010	0.009	0.009	0.007	0.008	0.008
1974	0.012	0.011	0.010	0.009	0.008	0.008	0.008	0.008
1975	0.009	0.010	0.009	0.009	0.009	0.006	0.007	0.007
1976	0.010	0.010	0.010	0.010	0.009	0.006	0.007	0.007
1977	0.010	0.010	0.010	0.010	0.009	0.008	0.007	0.007
1978	0.010	0.011	0.011	0.010	0.009	0.009	0.007	0.007
1979	0.013	0.012	0.012	0.011	0.010	0.009	0.008	0.008
1980	0.012	0.013	0.012	0.011	0.010	0.010	0.008	0.008
1981	0.013	0.012	0.011	0.010	0.010	0.008	0.007	0.008
1982	0.011	0.011	0.011	0.010	0.010	0.007	0.008	0.005

Table A-2

Return on Net Worth: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10M-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.077	0.080	0.086	0.086	0.091	0.091	0.084	0.086
1965	0.078	0.083	0.087	0.084	0.087	0.082	0.098	0.106
1966	0.081	0.090	0.095	0.088	0.091	0.090	0.113	0.105
1967	0.078	0.092	0.093	0.095	0.097	0.100	0.107	0.104
1968	0.084	0.190	0.094	0.101	0.102	0.098	0.117	0.114
1969	0.096	0.108	0.121	0.127	0.127	0.119	0.129	0.131
1970	0.108	0.121	0.128	0.123	0.133	0.113	0.125	0.139
1971	0.088	0.121	0.128	0.130	0.130	0.115	0.124	0.141
1972	0.092	0.114	0.129	0.130	0.132	0.120	0.113	0.133
1973	0.124	0.138	0.143	0.124	0.132	0.119	0.126	0.136
1974	0.128	0.141	0.141	0.131	0.129	0.122	0.126	0.137
1975	0.103	0.126	0.128	0.124	0.125	0.036	0.116	0.115
1976	0.109	0.125	0.127	0.128	0.120	0.344	0.109	0.111
1977	0.101	0.124	0.130	0.129	0.126	0.219	0.109	0.117
1978	0.108	0.128	0.135	0.119	0.130	0.177	0.116	0.126
1979	0.127	0.140	0.148	0.138	0.138	0.159	0.128	0.128
1980	0.109	0.142	0.145	0.134	0.138	0.149	0.123	0.134
1981	0.124	0.134	0.134	0.124	0.125	0.117	0.117	0.137
1982	0.108	0.105	0.132	0.115	0.127	0.114	0.131	0.075

Table A-3

Equity Capital/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.112	0.101	0.090	0.087	0.081	0.082	0.088	0.080
1965	0.109	0.960	0.087	0.084	0.080	0.081	0.087	0.078
1966	0.109	0.095	0.087	0.083	0.082	0.080	0.086	0.078
1967	0.108	0.093	0.086	0.081	0.079	0.078	0.083	0.075
1968	0.106	0.090	0.082	0.080	0.077	0.077	0.081	0.075
1969	0.105	0.089	0.083	0.081	0.079	0.077	0.084	0.078
1970	0.107	0.088	0.083	0.080	0.078	0.076	0.081	0.075
1971	0.105	0.086	0.080	0.078	0.077	0.073	0.079	0.071
1972	0.100	0.082	0.078	0.076	0.075	0.067	0.074	0.068
1973	0.096	0.081	0.078	0.078	0.076	0.067	0.072	0.068
1974	0.098	0.085	0.080	0.080	0.077	0.069	0.073	0.070
1975	0.097	0.085	0.080	0.080	0.076	0.069	0.074	0.071
1976	0.099	0.087	0.081	0.082	0.077	0.072	0.072	0.071
1977	0.100	0.088	0.082	0.082	0.076	0.071	0.070	0.067
1978	0.101	0.089	0.084	0.083	0.078	0.070	0.068	0.065
1979	0.104	0.092	0.087	0.085	0.079	0.072	0.067	0.065
1980	0.105	0.094	0.089	0.087	0.081	0.075	0.067	0.065
1981	0.105	0.094	0.089	0.086	0.080	0.072	0.067	0.063
1982	0.105	0.094	0.090	0.086	0.079	0.070	0.067	0.064

Table A-4

Equity Capital Plus Subordinated Notes and Debentures/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.112	0.102	0.090	0.088	0.082	0.084	0.091	0.082
1965	0.109	0.097	0.088	0.085	0.082	0.083	0.091	0.082
1966	0.110	0.096	0.088	0.084	0.084	0.084	0.090	0.083
1967	0.109	0.094	0.087	0.082	0.082	0.083	0.089	0.078
1968	0.107	0.091	0.083	0.082	0.079	0.092	0.086	0.078
1969	0.106	0.090	0.084	0.083	0.082	0.083	0.089	0.082
1970	0.107	0.089	0.084	0.083	0.081	0.081	0.086	0.078
1971	0.106	0.087	0.082	0.081	0.080	0.082	0.083	0.076
1972	0.100	0.084	0.080	0.079	0.078	0.075	0.080	0.075
1973	0.098	0.082	0.080	0.081	0.079	0.075	0.079	0.075
1974	0.099	0.086	0.083	0.084	0.080	0.076	0.079	0.077
1975	0.098	0.087	0.082	0.083	0.080	0.076	0.080	0.077
1976	0.100	0.089	0.084	0.085	0.080	0.080	0.077	0.078
1977	0.101	0.089	0.084	0.086	0.080	0.079	0.076	0.075
1978	0.102	0.091	0.086	0.087	0.082	0.079	0.073	0.073
1979	0.105	0.094	0.089	0.089	0.083	0.080	0.073	0.074
1980	0.106	0.095	0.091	0.090	0.085	0.081	0.072	0.072
1981	0.106	0.095	0.091	0.089	0.083	0.078	0.071	0.079
1982	0.106	0.095	0.091	0.088	0.082	0.075	0.071	0.069

Table A-5

Gross Loans/Total Deposits: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.462	0.480	0.500	0.523	0.529	0.577	0.593	0.607
1965	0.468	0.491	0.512	0.528	0.545	0.607	0.612	0.638
1966	0.492	0.514	0.531	0.543	0.562	0.610	0.610	0.640
1967	0.499	0.522	0.537	0.543	0.556	0.598	0.588	0.624
1968	0.492	0.511	0.531	0.548	0.561	0.600	0.587	0.632
1969	0.496	0.528	0.545	0.566	0.580	0.620	0.628	0.688
1970	0.507	0.529	0.540	0.557	0.566	0.598	0.585	0.652
1971	0.491	0.521	0.538	0.552	0.560	0.625	0.600	0.648
1972	0.478	0.513	0.548	0.556	0.560	0.626	0.603	0.656
1973	0.474	0.521	0.568	0.583	0.591	0.693	0.639	0.700
1974	0.482	0.533	0.579	0.596	0.604	0.683	0.643	0.700
1975	0.500	0.542	0.580	0.581	0.576	0.648	0.601	0.662
1976	0.527	0.561	0.586	0.583	0.576	0.633	0.580	0.646
1977	0.552	0.589	0.608	0.617	0.608	0.657	0.614	0.671
1978	0.585	0.638	0.658	0.675	0.663	0.692	0.674	0.720
1979	0.602	0.646	0.659	0.665	0.658	0.697	0.673	0.733
1980	0.549	0.597	0.612	0.619	0.634	0.660	0.648	0.704
1981	0.528	0.574	0.586	0.603	0.627	0.682	0.612	0.731
1982	0.529	0.562	0.578	0.585	0.601	0.679	0.601	0.694

Table A-6

Adjusted Net Interest on Deposits/Total Assets:
Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.011	0.011	0.012	0.013	0.013	0.011	0.010	0.012
1965	0.011	0.012	0.013	0.014	0.014	0.013	0.011	0.013
1966	0.013	0.014	0.015	0.016	0.016	0.015	0.013	0.016
1967	0.015	0.016	0.017	0.017	0.017	0.016	0.014	0.017
1968	0.016	0.017	0.018	0.019	0.018	0.018	0.015	0.017
1969	0.018	0.019	0.020	0.021	0.020	0.019	0.017	0.018
1970	0.020	0.021	0.022	0.022	0.022	0.020	0.017	0.019
1971	0.021	0.023	0.023	0.023	0.023	0.021	0.018	0.019
1972	0.021	0.023	0.024	0.024	0.024	0.020	0.018	0.019
1973	0.022	0.024	0.026	0.026	0.027	0.024	0.022	0.023
1974	0.025	0.028	0.030	0.031	0.032	0.030	0.027	0.031
1975	0.028	0.030	0.032	0.031	0.031	0.028	0.025	0.027
1976	0.029	0.032	0.033	0.033	0.031	0.027	0.025	0.027
1977	0.030	0.032	0.034	0.033	0.032	0.026	0.025	0.026
1978	0.032	0.034	0.035	0.035	0.034	0.030	0.027	0.029
1979	0.035	0.037	0.040	0.040	0.040	0.036	0.033	0.037
1980	0.046	0.048	0.051	0.049	0.046	0.034	0.027	0.033
1981	0.062	0.065	0.066	0.063	0.058	0.043	0.038	0.038
1982	0.070	0.072	0.070	0.064	0.058	0.039	0.044	0.040

Table A-7

Consumer Loans/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.078	0.093	0.116	0.143	0.148	0.182	0.165	0.159
1965	0.081	0.100	0.122	0.149	0.153	0.188	0.170	0.173
1966	0.082	0.102	0.125	0.152	0.154	0.185	0.159	0.172
1967	0.085	0.104	0.128	0.151	0.149	0.182	0.151	0.160
1968	0.087	0.104	0.129	0.156	0.150	0.185	0.160	0.159
1969	0.090	0.107	0.132	0.160	0.156	0.197	0.168	0.167
1970	0.090	0.104	0.131	0.157	0.150	0.193	0.156	0.153
1971	0.090	0.107	0.134	0.157	0.153	0.188	0.146	0.163
1972	0.095	0.109	0.139	0.161	0.148	0.186	0.149	0.152
1973	0.095	0.112	0.140	0.167	0.155	0.183	0.153	0.156
1974	0.094	0.110	0.137	0.162	0.152	0.198	0.141	0.163
1975	0.092	0.113	0.134	0.157	0.143	0.193	0.131	0.155
1976	0.098	0.125	0.145	0.168	0.145	0.195	0.137	0.155
1977	0.109	0.131	0.151	0.176	0.153	0.191	0.142	0.163
1978	0.116	0.137	0.160	0.183	0.164	0.193	0.153	0.170
1979	0.121	0.137	0.159	0.178	0.162	0.194	0.161	0.174
1980	0.105	0.120	0.137	0.153	0.143	0.174	0.148	0.150
1981	0.098	0.110	0.122	0.136	0.128	0.163	0.132	0.136
1982	0.098	0.103	0.117	0.125	0.121	0.172	0.123	0.123

Table A-8

Real Estate Loans/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.108	0.136	0.156	0.165	0.154	0.130	0.160	0.137
1965	0.108	0.141	0.160	0.169	0.163	0.134	0.166	0.147
1966	0.110	0.145	0.168	0.172	0.174	0.134	0.166	0.153
1967	0.113	0.148	0.167	0.172	0.171	0.136	0.163	0.145
1968	0.113	0.149	0.166	0.174	0.173	0.136	0.159	0.151
1969	0.111	0.153	0.170	0.177	0.176	0.144	0.142	0.160
1970	0.112	0.150	0.165	0.170	0.168	0.136	0.129	0.150
1971	0.103	0.145	0.163	0.169	0.166	0.148	0.139	0.138
1972	0.107	0.145	0.168	0.172	0.173	0.144	0.140	0.139
1973	0.107	0.151	0.179	0.185	0.190	0.163	0.145	0.153
1974	0.113	0.158	0.184	0.186	0.194	0.158	0.130	0.144
1975	0.117	0.161	0.183	0.185	0.192	0.515	0.138	0.144
1976	0.119	0.164	0.186	0.185	0.189	0.155	0.132	0.127
1977	0.133	0.176	0.196	0.201	0.199	0.160	0.150	0.130
1978	0.147	0.200	0.224	0.236	0.236	0.187	0.188	0.176
1979	0.144	0.197	0.225	0.234	0.235	0.192	0.189	0.179
1980	0.133	0.182	0.210	0.221	0.223	0.181	0.178	0.166
1981	0.121	0.170	0.196	0.211	0.212	0.164	0.170	0.167
1982	0.117	0.161	0.185	0.198	0.203	0.154	0.164	0.160

Table A-9

Residential Real Estate Loans/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.053	0.073	0.093	0.105	0.102	0.074	0.099	0.081
1965	0.054	0.075	0.095	0.105	0.107	0.076	0.104	0.086
1966	0.054	0.078	0.099	0.108	0.114	0.074	0.096	0.089
1967	0.057	0.080	0.099	0.107	0.112	0.073	0.094	0.086
1968	0.058	0.082	0.099	0.107	0.111	0.070	0.093	0.089
1969	0.057	0.083	0.101	0.108	0.113	0.074	0.070	0.090
1970	0.059	0.082	0.097	0.105	0.106	0.068	0.065	0.084
1971	0.056	0.082	0.095	0.104	0.107	0.076	0.074	0.081
1972	0.057	0.083	0.098	0.106	0.112	0.079	0.079	0.082
1973	0.124	0.138	0.143	0.124	0.132	0.119	0.126	0.136
1974	0.099	0.131	0.138	0.133	0.128	0.086	0.082	0.087
1975	0.103	0.133	0.137	0.132	0.127	0.086	0.080	0.083
1976	0.061	0.094	0.107	0.109	0.113	0.081	0.071	0.067
1977	0.074	0.103	0.114	0.120	0.120	0.085	0.087	0.072
1978	0.083	0.116	0.128	0.138	0.133	0.095	0.106	0.086
1979	0.083	0.117	0.130	0.139	0.135	0.101	0.108	0.089
1980	0.076	0.110	0.123	0.132	0.128	0.145	0.099	0.083
1981	0.069	0.103	0.116	0.126	0.122	0.083	0.095	0.081
1982	0.067	0.098	0.123	0.118	0.116	0.075	0.088	0.077

Table A-10

Commercial Real Estate Loans/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.010	0.020	0.030	0.037	0.043	0.049	0.058	0.050
1965	0.011	0.021	0.032	0.041	0.045	0.055	0.059	0.056
1966	0.011	0.021	0.035	0.041	0.050	0.056	0.066	0.060
1967	0.010	0.022	0.033	0.044	0.049	0.059	0.065	0.056
1968	0.010	0.023	0.034	0.045	0.051	0.062	0.063	0.059
1969	0.010	0.024	0.035	0.047	0.052	0.067	0.069	0.066
1970	0.011	0.023	0.036	0.045	0.050	0.064	0.061	0.063
1971	0.011	0.023	0.038	0.046	0.052	0.068	0.061	0.054
1972	0.012	0.024	0.039	0.046	0.055	0.063	0.059	0.055
1973	0.013	0.026	0.042	0.051	0.061	0.071	0.058	0.066
1974	0.013	0.026	0.045	0.052	0.066	0.072	0.048	0.057
1975	0.014	0.027	0.045	0.052	0.064	0.065	0.058	0.062
1976	0.014	0.029	0.045	0.052	0.063	0.065	0.054	0.053
1977	0.017	0.030	0.048	0.057	0.065	0.064	0.056	0.052
1978	0.017	0.033	0.049	0.060	0.067	0.061	0.055	0.051
1979	0.016	0.033	0.050	0.050	0.069	0.063	0.054	0.053
1980	0.016	0.032	0.048	0.058	0.066	0.061	0.054	0.047
1981	0.015	0.031	0.046	0.056	0.061	0.055	0.053	0.044
1982	0.015	0.029	0.043	0.052	0.060	0.052	0.051	0.042

Table A-11

Farm Loans/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.183	0.127	0.089	0.048	0.021	0.014	0.004	0.010
1965	0.181	0.130	0.090	0.048	0.020	0.015	0.004	0.009
1966	0.194	0.142	0.094	0.049	0.022	0.018	0.004	0.010
1967	0.195	0.142	0.095	0.048	0.022	0.016	0.005	0.009
1968	0.182	0.135	0.091	0.047	0.020	0.015	0.004	0.010
1969	0.183	0.132	0.092	0.048	0.021	0.014	0.004	0.009
1970	0.188	0.135	0.089	0.047	0.020	0.012	0.003	0.008
1971	0.192	0.137	0.090	0.046	0.019	0.012	0.003	0.009
1972	0.175	0.130	0.087	0.044	0.020	0.013	0.005	0.008
1973	0.173	0.130	0.089	0.044	0.020	0.016	0.006	0.008
1974	0.171	0.128	0.089	0.045	0.020	0.012	0.006	0.007
1975	0.179	0.131	0.092	0.044	0.018	0.012	0.004	0.008
1976	0.195	0.141	0.101	0.047	0.020	0.016	0.005	0.010
1977	0.198	0.141	0.101	0.047	0.019	0.013	0.007	0.010
1978	0.195	0.043	0.098	0.046	0.020	0.013	0.006	0.007
1979	0.204	0.149	0.096	0.042	0.018	0.015	0.006	0.006
1980	0.183	0.138	0.088	0.039	0.018	0.012	0.005	0.005
1981	0.174	0.128	0.081	0.036	0.016	0.009	0.004	0.004
1982	0.175	0.124	0.083	0.035	0.016	0.008	0.004	0.004

Table A-12

Commercial and Industrial Loans/Total Loans: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.083	0.138	0.161	0.200	0.249	0.271	0.268	0.327
1965	0.093	0.135	0.161	0.193	0.257	0.287	0.283	0.317
1966	0.089	0.131	0.156	0.199	0.254	0.289	0.285	0.316
1967	0.096	0.132	0.160	0.206	0.262	0.287	0.292	0.325
1968	0.096	0.133	0.161	0.203	0.266	0.298	0.284	0.339
1969	0.098	0.140	0.159	0.208	0.268	0.291	0.301	0.335
1970	0.101	0.146	0.174	0.213	0.279	0.287	0.302	0.346
1971	0.101	0.146	0.172	0.212	0.284	0.290	0.306	0.348
1972	0.100	0.145	0.175	0.213	0.282	0.290	0.297	0.352
1973	0.099	0.142	0.178	0.210	0.278	0.289	0.317	0.347
1974	0.105	0.151	0.185	0.218	0.280	0.296	0.346	0.350
1975	0.110	0.146	0.184	0.216	0.274	0.277	0.338	0.337
1976	0.119	0.145	0.179	0.221	0.279	0.267	0.317	0.345
1977	0.111	0.150	0.175	0.216	0.281	0.266	0.303	0.347
1978	0.114	0.147	0.168	0.206	0.264	0.260	0.291	0.346
1979	0.116	0.148	0.166	0.208	0.263	0.250	0.276	0.350
1980	0.123	0.158	0.181	0.216	0.281	0.271	0.275	0.376
1981	0.132	0.170	0.196	0.234	0.301	0.305	0.298	0.382
1982	0.140	0.182	0.201	0.248	0.300	0.307	0.314	0.395

Table A-13

U.S. Treasury Securities/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.331	0.302	0.262	0.245	0.238	0.177	0.164	0.173
1965	0.319	0.283	0.247	0.230	0.210	0.142	0.149	0.140
1966	0.305	0.266	0.231	0.207	0.189	0.131	0.136	0.124
1967	0.293	0.247	0.219	0.199	0.183	0.123	0.134	0.133
1968	0.290	0.250	0.212	0.185	0.164	0.118	0.123	0.118
1969	0.261	0.215	0.177	0.153	0.133	0.095	0.094	0.089
1970	0.260	0.211	0.173	0.149	0.130	0.093	0.092	0.087
1971	0.242	0.199	0.162	0.140	0.118	0.082	0.091	0.074
1972	0.217	0.180	0.143	0.128	0.109	0.074	0.088	0.064
1973	0.177	0.146	0.111	0.100	0.085	0.053	0.071	0.052
1974	0.158	0.123	0.092	0.082	0.069	0.045	0.068	0.041
1975	0.173	0.135	0.106	0.111	0.102	0.057	0.101	0.061
1976	0.172	0.137	0.110	0.116	0.111	0.064	0.125	0.078
1977	0.159	0.124	0.099	0.106	0.101	0.070	0.110	0.065
1978	0.151	0.112	0.089	0.089	0.085	0.062	0.091	0.053
1979	0.131	0.104	0.083	0.081	0.077	0.058	0.080	0.047
1980	0.143	0.118	0.096	0.094	0.092	0.061	0.090	0.053
1981	0.146	0.117	0.093	0.092	0.088	0.050	0.092	0.046
1982	0.152	0.123	0.103	0.099	0.092	0.053	0.097	0.059

Table A-14

Liquid Assets/Total Assets: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.586	0.562	0.537	0.511	0.506	0.463	0.455	0.440
1965	0.578	0.548	0.521	0.503	0.481	0.436	0.434	0.405
1966	0.556	0.526	0.504	0.487	0.466	0.426	0.435	0.403
1967	0.547	0.518	0.495	0.484	0.472	0.435	0.447	0.416
1968	0.551	0.522	0.491	0.475	0.459	0.434	0.442	0.407
1969	0.522	0.490	0.459	0.447	0.437	0.404	0.413	0.367
1970	0.506	0.486	0.466	0.456	0.446	0.410	0.430	0.375
1971	0.510	0.484	0.461	0.455	0.447	0.399	0.421	0.365
1972	0.507	0.474	0.445	0.441	0.441	0.380	0.401	0.358
1973	0.471	0.457	0.421	0.411	0.406	0.331	0.380	0.329
1974	0.462	0.446	0.409	0.405	0.392	0.333	0.391	0.330
1975	0.474	0.452	0.420	0.426	0.424	0.348	0.416	0.354
1976	0.450	0.432	0.403	0.415	0.414	0.347	0.425	0.354
1977	0.426	0.406	0.385	0.390	0.394	0.348	0.412	0.333
1978	0.420	0.389	0.370	0.367	0.376	0.356	0.401	0.336
1979	0.396	0.373	0.363	0.359	0.369	0.353	0.396	0.323
1980	0.408	0.394	0.387	0.390	0.389	0.354	0.413	0.356
1981	0.416	0.406	0.398	0.399	0.392	0.348	0.408	0.348
1982	0.430	0.409	0.405	0.408	0.400	0.349	0.403	0.360

Table A-15

Time Deposits/Demand Deposits: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.526	0.469	0.410	0.349	0.260	0.208	0.115	0.233
1965	0.574	0.518	0.464	0.385	0.291	0.250	0.151	0.276
1966	0.637	0.602	0.568	0.461	0.275	0.380	0.217	0.358
1967	0.722	0.693	0.666	0.560	0.468	0.437	0.298	0.437
1968	0.766	0.783	0.750	0.655	0.580	0.509	0.389	0.473
1969	0.775	0.790	0.774	0.642	0.563	0.400	0.361	0.386
1970	0.885	0.881	0.850	0.712	0.651	0.469	0.411	0.455
1971	0.935	0.946	0.929	0.787	0.718	0.525	0.465	0.510
1972	0.930	0.950	0.955	0.802	0.728	0.547	0.479	0.516
1973	0.923	0.961	0.971	0.867	0.805	0.625	0.576	0.638
1974	1.008	1.062	1.066	0.955	0.892	0.701	0.636	0.732
1975	1.092	1.153	1.178	1.056	0.934	0.678	0.666	0.739
1976	1.332	1.370	1.424	1.290	1.151	0.815	0.808	0.966
1977	1.365	1.412	1.426	1.269	1.149	0.832	0.802	0.957
1978	1.369	1.461	1.530	1.375	1.247	0.951	0.978	1.091
1979	1.642	1.710	1.848	1.654	1.493	1.062	1.105	1.143
1980	2.095	2.160	2.297	2.052	1.833	1.314	1.358	1.278
1981	2.998	3.173	3.263	2.717	2.349	1.626	1.803	1.665
1982	3.397	3.606	3.712	3.009	2.633	1.745	2.056	1.907

Table A-16

Time Deposits Plus Net Short-Term Borrowings/Total Loans:
Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.603	0.520	0.440	0.352	0.271	0.238	0.141	0.270
1965	0.645	0.542	0.461	0.373	0.269	0.265	0.171	0.268
1966	0.657	0.567	0.508	0.411	0.316	0.329	0.219	0.319
1967	0.723	0.613	0.553	0.473	0.392	0.380	0.282	0.382
1968	0.758	0.685	0.596	0.518	0.441	0.420	0.341	0.401
1969	0.675	0.592	0.512	0.427	0.360	0.289	0.300	0.305
1970	0.694	0.624	0.553	0.470	0.410	0.313	0.334	0.321
1971	0.731	0.650	0.579	0.499	0.436	0.362	0.365	0.323
1972	0.702	0.626	0.563	0.494	0.430	0.358	0.342	0.341
1973	0.578	0.599	0.526	0.468	0.411	0.379	0.397	0.403
1974	0.613	0.604	0.529	0.490	0.425	0.389	0.463	0.430
1975	0.699	0.642	0.581	0.540	0.475	0.372	0.484	0.443
1976	0.774	0.710	0.652	0.636	0.579	0.476	0.611	0.572
1977	0.716	0.671	0.625	0.602	0.568	0.502	0.621	0.546
1978	0.704	0.654	0.629	0.593	0.582	0.571	0.669	0.605
1979	0.706	0.699	0.701	0.650	0.647	0.623	0.699	0.623
1980	0.821	0.829	0.819	0.779	0.771	0.678	0.804	0.723
1981	0.924	0.936	0.915	0.877	0.850	0.793	0.891	0.817
1982	1.008	0.963	0.945	0.899	0.851	0.769	0.872	0.841

Table A-17

Asset Growth Rate: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1965	0.092	0.112	0.120	0.119	0.097	0.094	0.089	0.110
1966	0.068	0.087	0.090	0.085	0.097	0.099	0.130	0.077
1967	0.080	0.101	0.110	0.123	0.125	0.095	0.116	0.124
1968	0.099	0.114	0.131	0.124	0.126	0.102	0.123	0.114
1969	0.082	0.083	0.085	0.092	0.076	0.067	0.084	0.045
1970	0.066	0.099	0.104	0.104	0.121	0.104	0.120	0.138
1971	0.095	0.125	0.137	0.147	0.129	0.131	0.104	0.137
1972	0.140	0.150	0.151	0.151	0.151	0.178	0.162	0.171
1973	0.167	0.151	0.144	0.121	0.117	0.113	0.113	0.137
1974	0.097	0.087	0.102	0.098	0.096	0.057	0.086	0.059
1975	0.096	0.104	0.114	0.107	0.105	0.078	0.077	0.058
1976	0.086	0.088	0.099	0.090	0.090	0.046	0.096	0.088
1977	0.091	0.113	0.125	0.118	0.119	0.106	0.116	0.130
1978	0.095	0.103	0.094	0.105	0.091	0.106	0.121	0.147
1979	0.101	0.098	0.108	0.103	0.097	0.089	0.119	0.098
1980	0.102	0.106	0.099	0.096	0.091	0.065	0.089	0.114
1981	0.119	0.111	0.113	0.098	0.098	0.111	0.364	0.151
1982	0.101	0.101	0.090	0.099	0.111	0.116	0.082	0.135

Table A-18

Time Deposit Growth Rate: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964								
1965	0.205	0.448	0.943	0.287	0.291	0.399	0.452	0.290
1966	0.225	0.308	0.473	0.585	0.815	0.744	0.529	0.481
1967	0.356	0.415	0.540	0.429	0.502	0.354	0.487	0.395
1968	0.189	0.559	0.500	0.656	0.691	0.219	0.676	0.225
1969	0.162	0.206	0.286	0.172	0.125	0.200	0.698	0.151
1970	0.184	0.411	0.892	0.399	0.333	0.273	0.390	0.299
1971	0.177	0.183	0.253	0.403	0.193	0.254	0.355	0.171
1972	0.156	0.304	0.184	0.309	0.192	0.207	0.280	0.207
1973	0.197	0.172	0.541	0.257	0.192	0.210	0.246	0.320
1974	0.129	0.134	0.140	0.315	0.169	0.136	0.226	0.128
1975	0.135	0.151	0.379	0.168	0.130	0.019	0.092	0.044
1976	0.284	0.321	0.310	0.346	0.366	0.316	0.251	0.369
1977	0.098	0.135	0.123	0.106	0.121	0.123	0.152	0.163
1978	0.099	0.124	0.131	0.237	0.169	0.220	0.326	0.249
1979	0.227	0.245	0.539	0.262	0.281	0.191	0.265	0.149
1980	0.232	0.258	0.236	0.227	0.231	0.218	0.212	0.145
1981	0.215	0.208	0.187	0.179	0.171	0.117	0.171	0.250
1982	0.131	0.111	0.090	0.086	0.110	0.062	0.099	0.133

Table A-19

Operating Expenses/Operating Income: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.735	0.810	0.757	0.769	0.749	0.737	0.726	0.714
1965	0.739	0.750	0.753	0.765	0.763	0.752	0.735	0.724
1966	0.743	0.740	0.745	0.760	0.757	0.755	0.741	0.727
1967	0.751	0.755	0.762	0.777	0.772	0.759	0.752	0.751
1968	0.756	0.761	0.768	0.773	0.771	0.770	0.744	0.753
1969	0.773	0.780	0.779	0.782	0.771	0.800	0.765	0.762
1970	0.720	0.772	0.774	0.800	0.789	0.822	0.777	0.785
1971	0.795	0.789	0.798	0.814	0.822	0.832	0.822	0.809
1972	0.805	0.807	0.806	0.817	0.821	0.834	0.842	0.807
1973	0.757	0.775	0.787	0.806	0.822	0.850	0.841	0.826
1974	0.755	0.776	0.802	0.824	0.840	0.870	0.860	0.862
1975	0.813	0.815	0.830	0.843	0.854	0.881	0.875	0.884
1976	0.829	0.826	0.835	0.840	0.859	0.896	0.905	0.877
1977	0.832	0.822	0.831	0.836	0.845	0.861	0.891	0.877
1978	0.825	0.812	0.819	0.832	0.840	0.857	0.887	0.878
1979	0.802	0.803	0.813	0.831	0.848	0.868	0.893	0.897
1980	0.824	0.822	0.836	0.855	0.863	0.884	0.911	0.904
1981	0.839	0.853	0.868	0.887	0.895	0.915	0.932	0.917
1982	0.873	0.886	0.881	0.899	0.900	0.915	0.930	0.964

Table A-20

Fixed Occupancy Expenses/Operating Income: Means by Bank Size

Year	Asset Size Grouping							
	Under $10M	$10-$25M	$25-$50M	$50-$100M	$100-$300M	$300-$500M	$500M-$1B	Over $1B
1964	0.049	0.070	0.066	0.075	0.076	0.069	0.085	0.070
1965	0.046	0.057	0.062	0.070	0.073	0.070	0.084	0.070
1966	0.045	0.052	0.058	0.065	0.069	0.064	0.076	0.067
1967	0.043	0.051	0.057	0.064	0.069	0.066	0.075	0.072
1968	0.040	0.050	0.056	0.064	0.067	0.069	0.077	0.072
1969	0.041	0.049	0.053	0.059	0.066	0.074	0.071	0.067
1970	0.042	0.049	0.053	0.059	0.065	0.074	0.073	0.068
1971	0.041	0.047	0.052	0.060	0.066	0.077	0.077	0.072
1972	0.040	0.045	0.051	0.058	0.064	0.075	0.079	0.070
1973	0.038	0.043	0.047	0.053	0.059	0.065	0.065	0.061
1974	0.037	0.040	0.045	0.050	0.054	0.060	0.063	0.056
1975	0.040	0.044	0.048	0.053	0.059	0.065	0.076	0.069
1976	0.040	0.045	0.047	0.052	0.059	0.069	0.083	0.074
1977	0.042	0.044	0.046	0.052	0.060	0.067	0.081	0.077
1978	0.045	0.043	0.045	0.050	0.058	0.060	0.073	0.069
1979	0.042	0.039	0.041	0.046	0.053	0.051	0.062	0.057
1980	0.038	0.036	0.038	0.044	0.048	0.048	0.056	0.054
1981	0.034	0.032	0.033	0.040	0.044	0.044	0.053	0.047
1982	0.033	0.032	0.034	0.040	0.044	0.048	0.055	0.050

APPENDIX B

This appendix contains a description of statistical tests for the effects of size on bank financial ratios in addition to the subsequent results. The General Linear Model (GLM) procedure on the SAS system (i.e., Helwig and Council, 1979) for data analysis was employed to carry out fixed-effects analyses of variance (ANOVA). The GLM procedure is more appropriate than the ANOVA procedure in the present case because of the use of unbalanced data. Since the type of banking organization is likely to influence mean ratio differences among banks of different size, the factor "structure" was included. The general linear structural equation representing this 2x2 factorial design is as follows:

$$(1) \quad Y_{ijk} = \mu + \alpha_j + \beta_k + (\alpha\beta)_{jk} + \varepsilon_{jk}$$

where:

Y_{ijk} = the financial ratio for the i observations in cell jk ($i = 1, 2, \ldots, n_{jk}$);

μ = the overall population mean;

α_j = the effect of the jth level ($j = 1, 2, \ldots, 8$) of the bank size factor;

β_k = the effect of the kth level of the bank structure factor, where k = 1, 2, 3, and 4 corresponds to independent unit bank, independent branch bank, holding company unit bank, and holding company branch bank, respectively;

$(\alpha\beta)_{jk}$ = the interaction effect for the jth level of the size factor with the kth level of the structure factor; and,

ε_{ijk} = the random experimental error assumed normally distributed, mean zero, constant variance, and independent of treatment effects.

This standard analysis of variance problem may be generalized into a linear multiple regression form--hence the name "General Linear Model"--as follows:

$$(2)\quad Y_{ijk} = \mu + \alpha_1 X_{1i} + \alpha_2 X_{2i} + \ldots + \alpha_j X_{ji} + \beta_1 X_{j+1,i} + \ldots + \beta_k X_{j+k,i} + (\alpha\beta)_{11} X_{j+k+1,i} + \ldots + (\alpha\beta)_{1k} X_{j+2k,i} + (\alpha\beta)_{21} X_{j+2k+1,i} + \ldots + (\alpha\beta)_{2k} X_{j+3k,i} + (\alpha\beta)_{j1} X_{j+jk+1,i} + \ldots + (\alpha\beta)_{jk} X_{j+(j+1)k,i} + \varepsilon_{ijk}$$

Thus, there are 8 bank size α coefficients, 4 bank structure β coefficients, and 32 $(\alpha\beta)$ interaction coefficients.

The null hypotheses we wish to test using this model are:

1) Size Main Effect. $H_o: \alpha_1 = \alpha_2 = \ldots = \alpha_8 (j = 1, 2, \ldots, 8)$

2) Structure Main Effect. $H_o: \beta_1 = \beta_2 = \beta_3 = \beta_4$ $(k = 1, 2, 3, 4)$

3) Interaction Effect. $H_o: (\alpha\beta)_{11} = \ldots = (\alpha\beta)_{1k} = \ldots = (\alpha\beta)_{jk}$

In each case the GLM adjusts differences between means for any effect for their relationship with other effects. That is, an adjustment analogous to calculating partial sums of squares in multiple regression analysis to derive partial regression coefficients is made. The Type III GLM method partitions sums of squares in this way. Because cells with missing data may cause invalid parameter tests (e.g., see Hocking and Speed, 1975 and Speed, Hocking, and Hackney, 1978), three banks were added to the original sample of 1000 banks to fill empty cells.

The test results for the variables used in the text are reported in the remainder of this appendix. For each main effect and the

interaction effect t-values and two-tail probabilities that t equals zero are shown. An overall F and associated probability plus R^2 value are given for each model. These statistics indicate the strength of the model as a whole to explain differences among financial ratio means. The t statistics indicate the individual significance of bank size, structure, and their interaction in terms of accounting for ratio differences among banks.

Table B-1

Return on Assets: General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	0.23 (.978)	0.13 (.938)	0.62 (.905)	0.88 (.661)	.0272
1965	1.24 (.276)	0.07 (.973)	0.77 (.755)	1.47 (.049)	.0447
1966	1.98 (.054)	0.28 (.843)	0.53 (.961)	1.13 (.286)	.0348
1967	0.72 (.655)	1.09 (.354)	2.57 (.000)	2.38 (.000)	.0707
1968	2.96 (.005)	3.45 (.016)	1.94 (.007)	2.06 (.001)	.0618
1969	0.38 (.913)	0.12 (.943)	0.48 (.977)	0.59 (.964)	.0185
1970	1.79 (.085)	0.52 (.671)	0.53 (.927)	1.49 (.042)	.0454
1971	0.52 (.824)	0.26 (.857)	0.46 (.982)	0.61 (.956)	.0190
1972	1.44 (.184)	1.20 (.309)	1.17 (.265)	1.21 (.198)	.0373
1973	3.48 (.001)	0.80 (.495)	1.53 (.059)	1.99 (.001)	.0597
1974	1.90 (.066)	0.89 (.448)	0.79 (.738)	2.18 (.000)	.0650
1975	0.88 (.521)	1.16 (.324)	0.91 (.574)	1.83 (.004)	.0553
1976	1.52 (.155)	1.30 (.272)	0.49 (.973)	1.74 (.008)	.0526
1977	1.47 (.173)	1.94 (.120)	0.61 (.912)	2.02 (.001)	.0606
1978	1.21 (.294)	1.32 (2.66)	0.87 (.625)	2.02 (.001)	.0605
1979	2.91 (.005)	1.39 (.243)	0.51 (.969)	3.08 (.000)	.0894
1980	1.81 (.082)	0.59 (.623)	0.58 (.934)	2.13 (.000)	.0635
1981	2.17 (.035)	0.80 (.499)	0.94 (.540)	2.80 (.000)	.0822
1982	1.76 (.090)	0.24 (.871)	0.59 (.929)	1.53 (.034)	.0464

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Table B-2

Return on Net Worth: General Linear Model Results
t value (p< | t |)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	$\bar{R}^2$
1964	1.11 (.354)	0.35 (.789)	0.76 (.769)	0.96 (.523)	.0299
1965	0.75 (.634)	0.28 (.843)	1.14 (.296)	1.09 (.343)	.0335
1966	0.73 (.652)	0.41 (.747)	0.71 (.828)	0.90 (.629)	.0279
1967	2.65 (.010)	1.44 (.228)	2.64 (.000)	2.51 (.000)	.0742
1968	2.01 (.051)	0.42 (.739)	0.62 (.903)	1.23 (.182)	.0378
1969	3.96 (.000)	0.55 (.651)	0.74 (.793)	2.65 (.000)	.0780
1970	1.87 (.070)	0.66 (.581)	1.05 (.400)	1.78 (.006)	.0538
1971	1.92 (.063)	0.07 (.971)	0.62 (.909)	3.26 (.000)	.0942
1972	2.13 (.038)	0.77 (.514)	1.25 (.199)	3.49 (.000)	.1003
1973	0.72 (.659)	0.09 (.961)	1.52 (.062)	1.27 (.145)	.0391
1974	0.81 (.580)	1.36 (.254)	0.93 (.553)	1.21 (.204)	.0371
1975	1.07 (.381)	3.09 (.026)	2.26 (.001)	3.25 (.000)	.0904
1976	2.67 (.010)	5.22 (.002)	5.54 (.000)	5.71 (.000)	.1541
1977	3.13 (.003)	3.82 (.010)	3.27 (.000)	4.50 (.000)	.1256
1978	1.08 (.371)	0.77 (.513)	1.41 (.101)	1.63 (.016)	.0496
1979	1.79 (.085)	1.72 (.160)	1.19 (.254)	3.44 (.000)	.0990
1980	0.34 (.936)	0.37 (.774)	0.45 (.984)	1.60 (.021)	.0486
1981	0.64 (.727)	1.83 (.138)	0.80 (.722)	2.16 (.000)	.0645
1982	1.03 (.411)	0.24 (.871)	0.54 (.956)	1.51 (.036)	.0461

Table B-3

Equity Capital/Total Assets: General Linear Model Results
t value (p< l t l)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	4.18 (.000)	0.75 (.524)	0.58 (.935)	3.55 (.000)	.1019
1965	5.69 (.000)	1.80 (.144)	0.95 (.524)	5.97 (.000)	.1561
1966	5.51 (.000)	1.89 (.127)	0.65 (.883)	5.56 (.000)	.0508
1967	6.00 (.000)	2.39 (.066)	0.88 (.618)	6.33 (.000)	.1682
1968	5.46 (.000)	2.68 (.045)	1.26 (.191)	6.80 (.000)	.1785
1969	4.50 (.000)	1.95 (.118)	1.11 (.334)	5.83 (.000)	.1569
1970	4.07 (.000)	1.75 (.154)	1.26 (.194)	7.12 (.000)	.1852
1971	4.13 (.000)	1.68 (.168)	1.41 (.104)	7.65 (.000)	.1962
1972	3.51 (.001)	1.98 (.113)	1.55 (.054)	7.08 (.000)	.1844
1973	2.84 (.006)	2.19 (.086)	1.37 (.124)	5.48 (.000)	.1489
1974	3.36 (.002)	0.85 (.468)	1.13 (.307)	5.23 (.000)	.1431
1975	3.37 (.002)	0.77 (.516)	1.10 (.341)	4.97 (.000)	.1370
1976	3.46 (.001)	0.91 (.436)	0.94 (.540)	5.09 (.000)	.1398
1977	3.57 (.001)	1.30 (.273)	0.95 (.528)	5.77 (.000)	.1556
1978	3.25 (.002)	2.85 (.036)	0.93 (.553)	6.02 (.000)	.1612
1979	5.10 (.000)	2.31 (.073)	0.81 (.709)	7.43 (.000)	.1917
1980	5.68 (.000)	1.33 (.264)	0.92 (.566)	6.83 (.000)	.1790
1981	5.90 (.000)	2.25 (.079)	1.10 (.343)	7.97 (.000)	.2028
1982	6.10 (.000)	3.38 (.009)	1.06 (.381)	7.84 (.000)	.2002

Table B-4

Equity Capital Plus Subordinated Notes and Debentures/Total Assets: General Linear Model Results
t value (p< | t |)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	3.94 (.000)	0.74 (.532)	0.58 (.934)	3.37 (.000)	.0970
1965	5.36 (.000)	1.75 (.153)	0.95 (.522)	5.28 (.000)	.1443
1966	4.90 (.000)	1.76 (.152)	0.67 (.864)	4.91 (.000)	.1355
1967	5.45 (.000)	2.06 (.102)	0.88 (.616)	5.61 (.000)	.1519
1968	4.81 (.000)	2.25 (.080)	1.25 (.203)	6.04 (.000)	.1616
1969	4.03 (.000)	1.68 (.168)	1.10 (.337)	5.16 (.000)	.1415
1970	3.43 (.001)	1.40 (.239)	1.31 (.161)	6.39 (.000)	.1695
1971	3.34 (.002)	1.50 (.211)	1.34 (.137)	6.66 (.000)	.1754
1972	2.68 (.010)	1.96 (.116)	1.45 (.085)	5.83 (.000)	.1570
1973	2.49 (.015)	2.74 (.042)	1.26 (.194)	4.47 (.000)	.1248
1974	2.74 (.008)	1.21 (.304)	1.08 (.365)	4.18 (.000)	.1177
1975	2.85 (.006)	0.97 (.406)	1.80 (.366)	4.02 (.000)	.1137
1976	2.77 (.008)	0.94 (.424)	0.92 (.571)	4.08 (.000)	.1153
1977	2.58 (.012)	0.75 (.527)	0.87 (.628)	4.44 (.000)	.1242
1978	2.21 (.032)	1.77 (.150)	0.85 (.662)	4.67 (.000)	.1298
1979	3.40 (.002)	2.13 (.093)	0.77 (.765)	5.91 (.000)	.1587
1980	3.94 (.000)	1.12 (.339)	0.88 (.625)	5.60 (.000)	.1516
1981	4.29 (.000)	2.06 (.102)	1.12 (.322)	6.84 (.000)	.1792
1982	4.64 (.000)	3.66 (.012)	1.13 (.311)	6.91 (.000)	.1807

Table B-5

Gross Loans/Total Deposits: General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	3.09 (.003)	0.85 (.468)	0.85 (.658)	2.52 (.000)	.0745
1965	3.56 (.001)	1.29 (.276)	0.88 (.613)	2.96 (.000)	.0864
1966	2.25 (.028)	1.41 (.237)	0.87 (.627)	2.42 (.000)	.0719
1967	1.28 (.255)	1.48 (.216)	0.71 (.830)	1.82 (.004)	.0550
1968	3.03 (.004)	1.02 (.385)	0.68 (.856)	2.23 (.000)	.0665
1969	5.23 (.000)	0.45 (.722)	0.87 (.626)	3.17 (.000)	.0919
1970	2.63 (.011)	0.62 (.606)	0.73 (.800)	1.92 (.002)	.0577
1971	2.13 (.038)	1.33 (.264)	0.60 (.918)	2.36 (.000)	.0702
1972	2.76 (.008)	2.28 (.077)	0.50 (.972)	3.20 (.000)	.0926
1973	4.97 (.000)	3.01 (.029)	0.76 (.772)	5.56 (.000)	.1508
1974	4.18 (.000)	3.51 (.015)	0.67 (.868)	5.54 (.000)	.1504
1975	1.45 (.181)	1.81 (.141)	0.46 (.982)	3.25 (.000)	.0941
1976	0.72 (.653)	1.63 (.178)	0.58 (.934)	2.18 (.000)	.0650
1977	0.81 (.581)	2.64 (.047)	0.67 (.864)	2.45 (.000)	.0726
1978	1.21 (.296)	1.32 (.265)	0.71 (.831)	2.23 (.000)	.0935
1979	0.72 (.656)	3.09 (.026)	0.64 (.895)	2.87 (.000)	.0838
1980	1.38 (.210)	1.09 (.353)	.054 (.953)	3.30 (.000)	.0953
1981	3.42 (.001)	0.51 (.677)	0.63 (.900)	3.84 (.000)	.109
1982	2.60 (.012)	0.30 (.830)	0.98 (.488)	3.38 (.000)	.0974

Table B-6

Adjusted Net Interest on Deposits/Total Assets:
General Linear Model Results
t value (p< | t |)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	1.11 (.351)	2.36 (.069)	0.51 (.966)	1.29 (.131)	.0397
1965	1.23 (.284)	2.03 (.106)	0.48 (.976)	1.47 (.048)	.0448
1966	1.78 (.088)	2.42 (.064)	0.49 (.975)	1.82 (.004)	.0548
1967	1.73 (.098)	2.50 (.057)	0.62 (.905)	1.70 (.011)	.0514
1968	1.88 (.069)	1.68 (.167)	0.50 (.971)	1.27 (.150)	.0389
1969	1.97 (.056)	0.83 (.481)	0.56 (.943)	1.20 (.210)	.0369
1970	2.74 (.008)	1.43 (.230)	0.63 (.899)	1.63 (.017)	.0495
1971	3.10 (.003)	1.47 (.221)	0.62 (.905)	1.55 (.029)	.0471
1972	4.02 (.000)	1.95 (.119)	0.82 (.700)	2.25 (.000)	.0671
1973	4.77 (.000)	1.75 (.154)	0.79 (.736)	3.43 (.000)	.0988
1974	5.09 (.000)	2.30 (.075)	0.97 (.493)	4.36 (.000)	.1221
1975	4.09 (.000)	1.87 (.132)	1.18 (.260)	3.04 (.000)	.0885
1976	6.30 (.000)	2.75 (.041)	1.33 (.143)	3.75 (.000)	.1068
1977	6.99 (.000)	2.51 (.057)	1.42 (.097)	3.93 (.000)	.1116
1978	4.75 (.000)	1.41 (.238)	1.72 (.023)	3.76 (.000)	.1073
1979	3.82 (.001)	1.91 (.125)	1.42 (.098)	4.47 (.000)	.1248
1980	20.36 (.000)	3.28 (.020)	2.39 (.001)	8.15 (.000)	.2064
1981	21.71 (.000)	2.04 (.105)	2.80 (.000)	9.13 (.000)	.2257
1982	32.86 (.000)	0.95 (.419)	1.76 (.019)	14.18 (.000)	.3117

Table B-7

Consumer Loans/Total Assets: General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	9.55 (.000)	0.43 (.737)	1.20 (.244)	5.12 (.000)	.1406
1965	8.27 (.000)	0.22 (.882)	0.85 (.662)	4.57 (.000)	.1273
1966	7.70 (.000)	0.10 (.956)	0.86 (.648)	4.79 (.000)	.1326
1967	6.07 (.000)	0.16 (.922)	0.99 (.476)	4.42 (.000)	.1237
1968	7.64 (.000)	0.04 (.982)	0.94 (.537)	4.81 (.000)	.1331
1969	8.29 (.000)	0.23 (.875)	0.73 (.802)	4.87 (.000)	.1346
1970	8.75 (.000)	0.28 (.841)	0.72 (.820)	4.93 (.000)	.1361
1971	8.55 (.000)	0.72 (.541)	0.94 (.538)	5.44 (.000)	.1479
1972	8.31 (.000)	0.64 (.592)	0.99 (.470)	5.19 (.000)	.1423
1973	9.06 (.000)	0.83 (.483)	1.09 (.348)	5.61 (.000)	.1519
1974	8.73 (.000)	1.78 (.148)	1.08 (.363)	5.84 (.000)	.1571
1975	6.40 (.000)	1.81 (.141)	1.20 (.166)	5.20 (.000)	.1424
1976	5.77 (.000)	1.93 (.122)	1.61 (.039)	4.91 (.000)	.1354
1977	5.01 (.000)	2.38 (.067)	1.47 (.079)	4.51 (.000)	.1258
1978	4.29 (.000)	2.33 (.072)	1.61 (.041)	4.48 (.000)	.1251
1979	3.09 (.003)	3.69 (.012)	1.75 (.019)	4.39 (.000)	.1229
1980	2.46 (.017)	3.02 (.028)	1.72 (.023)	3.99 (.000)	.1130
1981	1.65 (.117)	2.88 (.035)	1.29 (.169)	3.31 (.000)	.0956
1982	1.47 (.173)	3.33 (.019)	1.17 (.270)	3.00 (.000)	.0874

Table B-8

Real Estate Loans/Total Assets: General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	1.65 (.116)	11.74 (.000)	0.77 (.755)	4.92 (.000)	.1358
1965	1.91 (.064)	11.33 (.000)	0.96 (.516)	5.23 (.000)	.1431
1966	2.20 (.032)	10.62 (.000)	0.74 (.792)	5.40 (.000)	.1471
1967	1.93 (.061)	10.66 (.000)	0.69 (.849)	5.09 (.000)	.1398
1968	2.06 (.045)	10.83 (.000)	0.65 (.882)	5.18 (.000)	.1419
1969	2.28 (.026)	10.55 (.000)	0.79 (.730)	5.52 (.000)	.1499
1970	1.94 (.060)	11.26 (.000)	0.74 (.799)	5.26 (.000)	.1439
1971	1.40 (.201)	11.05 (.000)	0.73 (.807)	5.90 (.000)	.1584
1972	1.20 (.302)	10.88 (.000)	0.78 (.744)	6.01 (.000)	.1609
1973	1.30 (.245)	10.83 (.000)	0.76 (.768)	6.57 (.000)	.1733
1974	1.34 (.226)	10.89 (.000)	0.65 (.885)	6.24 (.000)	.1661
1975	1.02 (.417)	11.51 (.000)	0.66 (.878)	5.92 (.000)	.1589
1976	1.18 (.309)	12.49 (.000)	0.56 (.942)	5.96 (.000)	.1598
1977	1.20 (.300)	13.41 (.000)	0.73 (.805)	5.76 (.000)	.1552
1978	1.17 (.315)	10.20 (.000)	0.84 (.675)	5.93 (.000)	.1591
1979	1.17 (.315)	11.06 (.000)	0.84 (.674)	6.38 (.000)	.1692
1980	1.33 (.234)	10.95 (.000)	0.79 (.739)	6.53 (.000)	.1724
1981	1.67 (.113)	9.07 (.000)	0.79 (.737)	6.70 (.000)	.1762
1982	1.61 (.129)	6.98 (.000)	0.71 (.829)	5.93 (.000)	.1593

Table B-9

Residential Real Estate Loans/Total Assets:
General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	2.18 (.034)	8.60 (.000)	0.53 (.958)	4.76 (.000)	.1319
1965	2.21 (.031)	8.30 (.000)	0.50 (.970)	5.01 (.000)	.1380
1966	2.67 (.010)	8.19 (.000)	0.43 (.988)	5.20 (.000)	.1425
1967	2.20 (.032)	8.22 (.000)	0.36 (.996)	4.89 (.000)	.1351
1968	1.89 (.067)	8.27 (.000)	0.36 (.996)	4.78 (.000)	.1324
1969	2.27 (.027)	8.73 (.000)	0.40 (.993)	5.38 (.000)	.1466
1970	1.71 (.102)	8.30 (.000)	0.37 (.995)	4.70 (.000)	.1304
1971	1.14 (.338)	8.80 (.000)	0.44 (.987)	4.91 (.000)	.1356
1972	0.99 (.436)	9.06 (.000)	0.47 (.879)	5.10 (.000)	.1400
1973	1.14 (.334)	10.15 (.000)	0.51 (.967)	5.82 (.000)	.1566
1974	1.89 (.068)	7.76 (.000)	0.45 (.985)	4.31 (.000)	.1209
1975	2.23 (.029)	7.64 (.000)	0.47 (.981)	4.16 (.000)	.1171
1976	0.85 (.544)	9.63 (.000)	0.51 (.966)	5.08 (.000)	.1394
1977	0.85 (.548)	10.63 (.000)	0169 (.848)	4.80 (.000)	.1329
1978	0.79 (.593)	9.72 (.000)	0.82 (.702)	4.62 (.000)	.1285
1979	0.68 (.690)	10.60 (.000)	0.83 (.689)	4.81 (.000)	.1331
1980	0.75 (.631)	10.79 (.000)	0.91 (.576)	5.20 (.000)	.1423
1981	0.96 (.460)	11.16 (.000)	0.83 (.691)	5.54 (.000)	.1504
1982	0.81 (.581)	9.97 (.000)	0.74 (.795)	5.08 (.000)	.1394

Table B-10

Commercial Real Estate Loans/Total Assets:
General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	8.63 (.000)	17.73 (.000)	1.43 (.096)	10.44 (.000)	.2499
1965	10.04 (.000)	14.96 (.000)	1.65 (.033)	10.30 (.000)	.2475
1966	11.80 (.000)	12.99 (.000)	1.53 (.059)	11.36 (.000)	.2661
1967	12.16 (.000)	13.66 (.000)	1.65 (.032)	11.84 (.000)	.2742
1968	12.90 (.000)	13.52 (.000)	1.85 (.011)	12.19 (.000)	.2802
1969	11.67 (.000)	8.80 (.000)	1.43 (.095)	10.06 (.000)	.2431
1970	11.01 (.000)	13.70 (.000)	1.80 (.015)	11.64 (.000)	.2709
1971	12.67 (.000)	10.73 (.000)	1.61 (.041)	11.87 (.000)	.2748
1972	12.31 (.000)	8.77 (.000)	1.33 (.147)	11.17 (.000)	.2628
1973	12.69 (.000)	6.85 (.000)	1.50 (.068)	11.27 (.000)	.2646
1974	14.73 (.000)	8.15 (.000)	1.41 (.104)	12.07 (.000)	.2781
1975	12.76 (.000)	9.42 (.000)	1.27 (.187)	11.35 (.000)	.2659
1976	12.05 (.000)	8.87 (.000)	1.08 (.360)	10.10 (.000)	.2439
1977	12.78 (.000)	8.69 (.000)	1.24 (.206)	10.08 (.000)	.2435
1978	11.14 (.000)	6.49 (.000)	0.96 (.510)	9.40 (.000)	.2308
1979	11.28 (.000)	6.38 (.000)	0.88 (.617)	10.18 (.000)	.2452
1980	10.93 (.000)	6.23 (.000)	0.82 (.694)	9.65 (.000)	.2355
1981	9.23 (.000)	5.10 (.002)	0.70 (.034)	8.81 (.000)	.2200
1982	11.03 (.000)	3.57 (.014)	0.52 (.962)	8.49 (.000)	.2133

Table B-11

Farm Loans/Total Assets: General Linear Model Results
t value (p< | t |)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	12.68 (.000)	2.22 (.083)	1.04 (.412)	11.81 (.000)	.2739
1965	12.43 (.000)	2.33 (.072)	0.92 (.569)	11.49 (.000)	.2683
1966	13.39 (.000)	2.17 (.089)	1.07 (.378)	11.93 (.000)	.2759
1967	13.77 (.000)	2.02 (.108)	1.11 (.333)	11.82 (.000)	.2740
1968	13.10 (.000)	2.58 (.051)	1.19 (.255)	12.14 (.000)	.2793
1969	12.22 (.000)	2.97 (.031)	1.19 (.254)	12.07 (.000)	.2781
1970	12.60 (.000)	2.53 (.055)	1.19 (.254)	12.18 (.000)	.2800
1971	12.82 (.000)	2.25 (.079)	1.15 (.288)	11.66 (.000)	.2712
1972	12.19 (.000)	2.58 (.051)	1.40 (.110)	11.57 (.000)	.2697
1973	11.87 (.000)	2.59 (.051)	1.44 (.092)	11.08 (.000)	.2613
1974	14.58 (.000)	2.34 (.071)	1.57 (.050)	12.59 (.000)	.2867
1975	15.34 (.000)	2.28 (.077)	1.42 (.098)	12.54 (.000)	.2858
1976	15.19 (.000)	2.33 (.072)	1.44 (.092)	12.23 (.000)	.2808
1977	14.40 (.000)	2.23 (.082)	1.39 (.111)	11.75 (.000)	.2727
1978	14.40 (.000)	2.14 (.092)	1.41 (.103)	11.97 (.000)	.2765
1979	16.07 (.000)	2.07 (.101)	1.41 (.103)	12.79 (.000)	.2899
1980	15.78 (.000)	2.02 (.108)	1.43 (.095)	12.78 (.000)	.2897
1981	15.77 (.000)	1.64 (.176)	1.35 (.136)	12.56 (.000)	.2862
1982	15.01 (.000)	1.67 (.170)	1.34 (.140)	12.02 (.000)	.2773

Table B-12

Commercial and Industrial Loans/Total Loans:
General Linear Model Results
t value (p< | t |)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	14.01 (.000)	1.54 (.201)	1.65 (.034)	7.33 (.000)	.1897
1965	16.25 (.000)	1.85 (.135)	1.61 (.041)	7.42 (.000)	.1916
1966	18.54 (.000)	2.37 (.068)	1.77 (.018)	8.61 (.000)	.2156
1967	18.67 (.000)	3.03 (.028)	1.88 (.010)	8.41 (.000)	.2116
1968	19.88 (.000)	3.03 (.028)	2.04 (.004)	8.99 (.000)	.2230
1969	21.19 (.000)	3.44 (.016)	2.22 (.001)	9.66 (.000)	.2357
1970	18.07 (.000)	2.41 (.065)	2.33 (.001)	9.06 (.000)	.2243
1971	21.33 (.000)	3.44 (.017)	2.35 (.001)	9.97 (.000)	.2414
1972	19.81 (.000)	2.54 (.054)	2.83 (.000)	10.74 (.000)	.2553
1973	20.45 (.000)	2.04 (.105)	2.63 (.000)	11.33 (.000)	.2656
1974	20.49 (.000)	2.31 (.074)	2.35 (.001)	11.06 (.000)	.2610
1975	22.32 (.000)	3.74 (.011)	1.92 (.008)	10.59 (.000)	.2527
1976	22.10 (.000)	3.07 (.027)	2.29 (.001)	10.59 (.000)	.2527
1977	23.13 (.000)	4.19 (.006)	2.48 (.000)	10.71 (.000)	.2548
1978	23.66 (.000)	7.14 (.000)	3.01 (.000)	10.80 (.000)	.2563
1979	26.37 (.000)	8.99 (.000)	3.01 (.000)	11.44 (.000)	.2676
1980	24.98 (.000)	10.14 (.000)	2.70 (.000)	10.62 (.000)	.2533
1981	23.38 (.000)	10.25 (.000)	2.53 (.000)	10.96 (.000)	.2593
1982	18.57 (.000)	8.08 (.000)	1.51 (.067)	8.87 (.000)	.2207

Table B-13

U.S. Treasury Securities/Total Assets:
General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	7.67 (.000)	0.09 (.961)	0.83 (.680)	4.72 (.000)	.1310
1965	8.97 (.000)	0.49 (.692)	0.55 (.950)	5.16 (.000)	.1415
1966	10.53 (.000)	0.34 (.799)	0.64 (.889)	5.69 (.000)	.1537
1967	9.69 (.000)	0.28 (.840)	0.81 (.716)	5.38 (.000)	.1465
1968	14.59 (.000)	0.34 (.795)	0.99 (.475)	7.24 (.000)	.1878
1969	15.38 (.000)	0.87 (.460)	1.00 (.466)	7.62 (.000)	.1957
1970	13.62 (.000)	0.37 (.780)	0.81 (.714)	7.11 (.000)	.1851
1971	11.91 (.000)	0.33 (.806)	0.72 (.814)	6.55 (.000)	.1731
1972	8.59 (.000)	0.95 (.420)	0.76 (.774)	5.92 (.000)	.1585
1973	6.86 (.000)	1.12 (.340)	0.66 (.879)	5.96 (.000)	.1599
1974	5.59 (.000)	1.03 (.377)	0.65 (.886)	5.94 (.000)	.1593
1975	2.36 (.022)	1.14 (.331)	0.88 (.620)	4.05 (.000)	.1146
1976	1.48 (.169)	0.80 (.498)	1.39 (.111)	4.15 (.000)	.1169
1977	1.79 (.085)	1.06 (.365)	1.11 (.330)	3.78 (.000)	.1076
1978	1.73 (.097)	1.15 (.328)	1.00 (.463)	4.34 (.000)	.1216
1979	1.61 (.127)	1.42 (.235)	0.90 (.595)	3.76 (.000)	.1071
1980	1.51 (.158)	1.57 (.192)	0.72 (.812)	3.19 (.000)	.0924
1981	2.03 (.048)	1.10 (.349)	0.54 (.956)	3.59 (.000)	.1029
1982	1.50 (.164)	1.01 (.391)	0.52 (.964)	2.89 (.000)	.0845

Table B-14

Liquid Assets/Total Assets: General Linear Model Results
t value ($p< 1 t 1$)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	4.68 (.000)	1.06 (.368)	0.78 (.746)	3.52 (.000)	.1010
1965	4.87 (.000)	1.66 (.172)	0.75 (.779)	3.97 (.000)	.1124
1966	3.60 (.001)	1.78 (.147)	0.79 (.729)	3.42 (.000)	.0985
1967	2.43 (.018)	1.36 (.252)	0.60 (.924)	2.64 (.000)	.0776
1968	4.86 (.000)	0.86 (.462)	0.57 (.937)	3.47 (.000)	.0997
1969	4.91 (.000)	0.91 (.436)	0.92 (.568)	3.54 (.000)	.1015
1970	2.27 (.027)	1.07 (.362)	0.70 (.841)	2.24 (.000)	.0667
1971	1.58 (.137)	2.21 (.085)	0.47 (.980)	2.50 (.000)	.0740
1972	1.66 (.114)	3.35 (.019)	0.62 (.906)	3.04 (.000)	.0884
1973	3.11 (.003)	3.08 (.026)	0.62 (.905)	3.55 (.000)	.1017
1974	2.71 (.009)	2.59 (.051)	0.73 (.800)	3.74 (.000)	.1068
1975	1.34 (.226)	2.07 (.101)	0.55 (.952)	2.60 (.000)	.0767
1976	0.96 (.460)	1.69 (.166)	0.58 (.936)	2.25 (.000)	.0669
1977	0.97 (.453)	1.18 (.316)	0.54 (.956)	1.95 (.002)	.0587
1978	0.69 (.686)	1.33 (.263)	0.61 (.911)	2.43 (.000)	.0721
1979	0.66 (.709)	2.68 (.045)	0.70 (.838)	2.32 (.000)	.0690
1980	0.62 (.741)	1.00 (.392)	0.52 (.963)	1.64 (.016)	.0497
1981	0.96 (.474)	1.04 (.375)	0.62 (.904)	1.72 (.009)	.0520
1982	0.85 (.546)	0.55 (.653)	0.67 (.866)	0.93 (.002)	.0581

Table B-15

Time Deposits/Demand Deposits:
General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	6.23 (.000)	0.09 (.962)	0.77 (.755)	2.52 (.000)	.0745
1965	6.72 (.000)	0.o8 (.908)	0.87 (.639)	2.68 (.000)	.0788
1966	5.65 (.000)	0.33 (.803)	0.88 (.616)	2.39 (.000)	.0708
1967	4.76 (.000)	0.37 (.774)	0.71 (.831)	1.95 (.000)	.0585
1968	3.77 (.001)	0.27 (.845)	0.83 (.680)	1.76 (.000)	.0533
1969	5.26 (.000)	0.22 (.881)	0.93 (.556)	2.31 (.000)	.0686
1970	4.60 (.000)	0.19 (.901)	0.84 (.674)	2.20 (.000)	.0658
1971	4.20 (.000)	0.61 (.680)	0.95 (.532)	2.20 (.000)	.0657
1972	4.37 (.000)	0.40 (.758)	0.89 (.609)	2.28 (.000)	.0678
1973	2.69 (.009)	0.82 (.484)	0.99 (.475)	1.65 (.014)	.0501
1974	2.68 (.010)	0.92 (.434)	1.13 (.308)	1.77 (.006)	.0535
1975	4.01 (.000)	1.02 (.385)	1.10 (.338)	2.13 (.000)	.0637
1976	4.44 (.000)	0.91 (.439)	1.07 (.379)	2.11 (.000)	.0632
1977	5.01 (.000)	0.89 (.448)	1.58 (.048)	2.64 (.000)	.0778
1978	4.10 (.000)	1.24 (.293)	1.47 (.079)	2.22 (.000)	.0661
1979	4.86 (.000)	0.85 (.471)	1.48 (.074)	2.62 (.000)	.0773
1980	5.89 (.000)	1.44 (.228)	1.64 (.035)	2.94 (.000)	.0858
1981	8.97 (.000)	0.44 (.725)	1.31 (.161)	3.62 (.000)	.0103
1982	9.93 (.000)	0.10 (.953)	1.32 (.149)	4.07 (.000)	.1151

Table B-16

Time Deposits Plus Net Short-Term Borrowings/Total Loans:
General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	9.56 (.000)	0.31 (.819)	0.99 (.467)	4.68 (.000)	.1299
1965	9.98 (.000)	0.17 (.911)	0.89 (.610)	5.02 (.000)	.1380
1966	8.91 (.000)	0.45 (.724)	0.74 (.789)	4.66 (.000)	.1294
1967	6.28 (.000)	0.91 (.437)	0.59 (.928)	3.93 (.000)	.1115
1968	6.48 (.000)	0.82 (.487)	0.82 (.695)	4.38 (.000)	.1226
1969	5.68 (.000)	0.30 (.829)	1.14 (.299)	3.96 (.000)	.1122
1970	3.90 (.000)	0.69 (.564)	0.69 (.844)	3.29 (.000)	.0951
1971	3.13 (.000)	0.75 (.528)	0.72 (.814)	3.44 (.000)	.0989
1972	2.44 (.018)	0.99 (.398)	0.98 (.486)	3.43 (.000)	.0987
1973	1.99 (.053)	0.68 (.571)	1.02 (.433)	2.51 (.000)	.0742
1974	1.60 (.131)	0.72 (.543)	1.16 (.281)	2.93 (.000)	.0857
1975	1.72 (.099)	1.05 (.371)	0.99 (.470)	2.89 (.000)	.0846
1976	0.74 (.637)	1.02 (.386)	0.73 (.803)	2.18 (.000)	.0651
1977	0.71 (.667)	0.43 (.726)	0.55 (.952)	1.58 (.023)	.0482
1978	0.42 (.889)	0.89 (.450)	0.60 (.924)	1.51 (.038)	.0459
1979	0.84 (.554)	1.66 (.172)	1.02 (.440)	1.83 (.004)	.0552
1980	0.62 (.741)	0.48 (.698)	1.04 (.416)	1.63 (.017)	.0494
1981	0.53 (.811)	0.55 (.653)	0.92 (.560)	1.44 (.057)	.0440
1982	0.77 (.615)	0.85 (.469)	0.60 (.922)	1.71 (.010)	.0518

Table B-17

Asset Growth Rate: General Linear Model Results
t value (p< l t l)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1965	0.64 (.725)	0.33 (.808)	0.44 (.986)	0.53 (.984)	.0167
1966	9.47 (.859)	0.68 (.569)	1.33 (.144)	1.12 (.296)	.0346
1967	1.66 (.116)	1.13 (.334)	0.69 (.843)	1.47 (.049)	.0447
1968	1.22 (.286)	0.64 (.594)	1.05 (.397)	1.52 (.034)	.0463
1969	0.78 (.604)	1.67 (.170)	1.28 (.178)	1.24 (.170)	.0382
1970	1.26 (.266)	0.12 (.945)	1.18 (.256)	2.12 (.000)	.0633
1971	1.65 (.117)	0.29 (.836)	0.76 (.766)	1.89 (.003)	.0569
1972	0.26 (.969)	0.60 (.618)	0.53 (.961)	0.71 (.885)	.0220
1973	3.18 (.003)	0.20 (.896)	0.70 (.839)	1.78 (.006)	.0538
1974	0.94 (.478)	2.72 (.042)	0.89 (.610)	1.00 (.465)	.0310
1975	1.83 (.078)	1.37 (.248)	1.51 (.066)	1.70 (.010)	.0515
1976	0.93 (.484)	0.48 (.702)	1.07 (.379)	1.17 (.237)	.0361
1977	0.52 (.818)	0.92 (.434)	0.78 (.743)	1.40 (.074)	.0427
1978	1.88 (.070)	3.81 (.010)	1.31 (.156)	1.79 (.005)	.0541
1979	0.76 (.619)	3.90 (.009)	0.72 (.819)	1.53 (.033)	.0466
1980	1.47 (.174)	5.94 (.001)	2.12 (.002)	2.16 (.000)	.0646
1981	1.41 (.198)	3.12 (.025)	2.72 (.000)	3.58 (.000)	.1027
1982	0.99 (.436)	0.21 (.888)	0.57 (.941)	0.66 (.925)	.0206

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Table B-18

Time Deposit Growth Rate: General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1965	0.34 (.937)	0.04 (.985)	0.39 (.994)	0.52 (.986)	.0164
1966	1.76 (.092)	0.55 (.654)	0.54 (.956)	1.15 (.261)	.0355
1967	0.01 (1.000)	0.01 (.995)	0.09 (1.000)	0.20 (1.000)	.0064
1968	0.33 (.941)	0.01 (.994)	0.63 (.901)	0.68 (.911)	.0211
1969	3.50 (.001)	5.45 (.001)	2.38 (.001)	1.85 (.003)	.0558
1970	0.07 (.999)	0.01 (.995)	0.25 (1.000)	0.27 (1.000)	.0086
1971	1.18 (.308)	0.36 (.782)	0.28 (1.000)	0.64 (.936)	.0201
1972	0.42 (.890)	0.05 (.978)	0.50 (.970)	0.56 (.976)	.0175
1973	0.13 (.995)	0.01 (.995)	0.30 (.999)	0.34 (1.000)	.0108
1974	0.03 (1.000)	0.01 (.997)	0.13 (1.000)	0.30 (1.000)	.0094
1975	0.03 (1.000)	0.00 (.998)	0.10 (1.000)	0.16 (1.000)	.0050
1976	0.45 (.874)	0.23 (.875)	1.00 (.459)	0.78 (.790)	.0246
1977	0.32 (.944)	0.25 (.860)	0.25 (1.000)	0.35 (1.000)	.0109
1978	1.04 (.404)	0.26 (.854)	0.44 (.987)	1.05 (.395)	.0324
1979	0.20 (.984)	0.02 (.991)	0.20 (1.000)	0.32 (1.000)	.0101
1980	0.03 (1.000)	0.02 (.993)	0.12 (1.000)	0.31 (1.000)	.0099
1981	1.90 (.066)	2.62 (.049)	2.59 (.000)	3.86 (.000)	.1097
1982	0.70 (.674)	1.05 (.369)	0.86 (.645)	1.11 (.309)	.0343

Table B-19

Operating Expenses/Operating Income:
General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	0.19 (.987)	0.07 (.970)	0.20 (1.000)	0.32 (.999)	.0102
1965	1.13 (.340)	2.17 (.089)	0.81 (.713)	1.15 (.259)	.0355
1966	1.13 (.340)	2.32 (.073)	0.66 (.876)	0.98 (.502)	.0303
1967	1.25 (.272)	2.76 (.040)	0.76 (.769)	1.27 (.150)	.0389
1968	0.93 (.483)	1.90 (.126)	0.77 (.759)	0.86 (.683)	.0286
1969	0.63 (.732)	0.29 (.832)	0.62 (.906)	0.64 (.934)	.0202
1970	1.99 (.134)	0.32 (.816)	0.57 (.941)	1.18 (.235)	.0362
1971	0.99 (.439)	0.49 (.695)	0.44 (.987)	1.04 (.408)	.0321
1972	0.86 (.540)	0.81 (.490)	0.71 (.830)	0.94 (.560)	.0292
1973	4.01 (.000)	0.72 (.546)	1.04 (.409)	2.96 (.000)	.0862
1974	4.81 (.000)	1.21 (.306)	1.14 (.295)	4.66 (.000)	.1294
1975	1.11 (.353)	3.18 (.023)	1.03 (.423)	3.13 (.000)	.0908
1976	1.14 (.338)	3.40 (.017)	0.78 (.753)	2.32 (.000)	.0690
1977	1.16 (.326)	4.35 (.005)	0.93 (.555)	2.78 (.000)	.0814
1978	1.79 (.084)	2.65 (.047)	1.10 (.343)	2.69 (.000)	.0792
1979	4.09 (.000)	2.61 (.050)	0.78 (.752)	4.78 (.000)	.1325
1980	3.14 (.003)	1.59 (.189)	0.91 (.572)	3.85 (.000)	.1094
1981	3.54 (.001)	1.94 (.120)	0.98 (.480)	4.27 (.000)	.1200
1982	2.48 (.016)	0.03 (.990)	0.93 (.555)	1.97 (.001)	.0590

Table B-20

Fixed Occupancy Expenses/Operating Income:
General Linear Model Results
t value (p< 1 t 1)

Year	Size (df=7)	Structure (df=3)	Interaction (df=21)	Overall F	R^2
1964	0.37 (.918)	0.04 (.986)	0.29 (.999)	0.50 (.990)	.0157
1965	2.97 (.005)	0.46 (.717)	0.64 (.889)	2.76 (.000)	.0810
1966	3.81 (.001)	0.57 (.636)	0.68 (.860)	2.90 (.000)	.0849
1967	4.06 (.000)	1.07 (.361)	0.94 (.536)	3.51 (.000)	.1007
1968	5.12 (.000)	1.10 (.347)	1.03 (.419)	4.23 (.000)	.1190
1969	4.14 (.000)	2.70 (.044)	1.40 (.107)	4.51 (.000)	.1259
1970	4.23 (.000)	3.38 (.018)	1.51 (.066)	4.23 (.000)	.1190
1971	6.48 (.000)	2.55 (.054)	1.67 (.030)	5.90 (.000)	.1585
1972	6.81 (.000)	1.69 (.165)	1.28 (.175)	5.41 (.000)	.1472
1973	4.76 (.000)	2.03 (.106)	0.84 (.674)	4.15 (.000)	.1169
1974	4.52 (.000)	3.54 (.014)	1.04 (.414)	4.40 (.000)	.1231
1975	3.93 (.000)	3.91 (.009)	1.24 (.211)	5.11 (.000)	.1402
1976	4.39 (.000)	2.07 (.101)	0.79 (.741)	4.02 (.000)	.1139
1977	6.96 (.000)	1.44 (.229)	1.00 (.460)	5.30 (.000)	.1385
1978	5.22 (.000)	2.08 (.099)	1.06 (.386)	3.86 (.000)	.1096
1979	3.37 (.002)	2.92 (.033)	0.95 (.526)	3.44 (.000)	.0991
1980	3.44 (.001)	3.25 (.021)	1.01 (.444)	4.04 (.000)	.1143
1981	4.72 (.000)	4.11 (.007)	1.02 (.431)	4.66 (.000)	.1295
1982	5.08 (.000)	4.86 (.003)	0.90 (.592)	5.53 (.000)	.1500

APPENDIX C

This appendix describes more fully the models of overall financial performance used to evaluate banks. Because the Federal Deposit Insurance Corporation (FDIC), Federal Reserve Board (FRB), and Office of the Comptroller of the Currency (OCC) all utilize computer screening programs based on financial ratio data to identify banks with potential or existing problems, three models were developed with variables comparable to those actually employed. A fourth model was constructed from a factor analysis involving the variables in the other three models plus other variables selected from literature on problem bank forecasting—i.e., Stuhr and Van Wicklen (1974), Sinkey and Walker (1975), Sinkey (1975), Korobrow, Stuhr, and Martin (1977), and Sinkey (1978)--and bank failure forecasting—i.e., Meyer and Pifer (1970), Sinkey (1975), Hanweck (1977), Sinkey (1977), and Rose and Scott (1978). Factor analysis is a statistical technique that tends to group variables correlated with one another into "factors," which is a generic label representative of some basic, or fundamental, characteristic underlying the data. In the present context, for example, factors such as profitability, capitalization, and liquidity are general names for financial traits that describe the basic meaning of variables like return on assets, equity/assets, and U.S. Treasury securities/assets, respectively. Thirteen factors were derived from the data according to the common stopping rule that factor eigenvalues should exceed one--a criterion that simply says that a factor should account for more of the variance than one individual variable to be considered an underlying trait in the

data. (Those desiring a more complete explanation of factor analysis should refer to Kaiser (1959), Mulaik (1972), or Rummel (1970)). The variable most highly correlated with each factor was then selected for use in our model. This model has the advantage of containing relatively uncorrelated variables, each of which contributes new information not present in the other variables. The four alternative variable sets are defined generally as follows:

Model I (Factor): X1-Net Income/Noncash Assets, X2-Liquid Assets/Assets, X3-Loan Losses/Capital, X4-Security Loans/Assets, X5-Time Deps./Demand Deps., X6-Loans, X7-Farm Loans/Assets, X8-Institutional Loans/Assets, X9-Cash Divs./Net Income, X10-Other Time Deps. Growth Rate, X11-Net Income/Assets, X12-Farm RE Loans/Assets, X13-LT Debt/Equity.

Model II (FDIC): X1-Equity Capital Growth Rate, X2-Equity/Assets, X3-Net Op. Inc./Assets, X4-Net Charge Offs/Loans, X5-Loans/Deposits, X6-Net ST Borrowings/Adj. Deps., X7-Purchased Funds/Loans, X8-Time Deps. Growth Rate Minus Deposit Growth Rate, X9-Other Time Deps. Growth Rate, X10-Loan Growth Rate Minus Deposit Growth Rate, X11-Cash Divs./Net Income, X12-Adj. Interest Exps./Net Op. Inc.

Model III (FRB): X1-Equity/Adj. Risk Assets, X2-Capital/Adj. Risk Assets, X3-Net Income/Noncash Assets, X4-Loan Losses/Net Op. Inc., X5-Loans/ST Liabilities, X6-Net Liquid Assets/ST Liabilities, X7-Adj. Purchased Funds/Adj. Deposits, X8-Operating Exps./Operating Inc., X9-Other Op. Exps./Adj. Op. Inc., X10-Cash Divs./Net Income, X11-Business Loans/Loans.

Model IV (OCC): X1-Equity/Assets, X2-Retained Earnings/Equity, X3-Net Income/Assets, X4-Security Earnings/Assets, X5-Loan Loss Provision/Assets, X6-Asset Growth Rate, X7-Noninterest Exps./Assets, X8-Net Op. Inc., X9-Net Inc. Plus Loan Loss Provision/Assets, X10-Adj. Other Op. Exps./Adj. Op. Inc.

The breadth of these variable sets enables us to build models combining financial variables which, by consensus opinion, are valuable indicators of bank condition. The MULDIS MDA routine by Eisenbeis and

Avery (1972) was applied to the failed (n=79) and survivor (n=1003) bank samples to: (1) determine the type of MDA model appropriate for the data, and (2) estimate the chances that each survivor bank would not fail. Data was collected one year prior to failure for the failed bank sample. The survivor banks were then distributed randomly among the years 1969 to 1979 according to the proportions of the 79 total failed banks that data was gathered for year-by-year. Data for the survivor banks in the year to which they were assigned was gathered. This procedure yielded the following sample sizes by year for use in the MDA models:

One Year Prior Data	Survivor Banks	Failed Banks
1969	89	7
1970	63	5
1971	15	1
1972	76	6
1973	51	4
1974	152	12
1975	203	16
1976	63	5
1977	62	5
1978	127	10
1979	121	8

Distributing the survivor banks in proportion to the failure rate over the analysis period should help reduce biases due to cyclical changes in bank condition. Hence, the resultant models' coefficients are more heavily influenced by period of distress in banking when problem situations are most likely to arise.

Table C-1 reports the findings on the ability of the four MDA models to classify failed and survivor banks. Both linear and quadratic rules were tested; however, the quadratic rules are most appropriate in lieu of the inequality of variance-covariance matrices (see footnote a of Table A-1). Because failed banks may be suspected of having similar

financial characteristics due to their mutual difficulties prior to failure, it is not surprising that the two groups of banks have different dispersion matrices. This assymetry affected the linear classification results by increasing the probability that any given bank would be classified as a survivor. Consequently, type II errors (i.e., failed banks classified as nonfailed) were higher than in the quadratic models. The quadratic models not only made fewer type II errors but did as well as the linear models in terms of overall classificatory power. Importantly, all of the models predicted more than one-half of the failures one year prior to collapse, and model IV (OCC) correctly classified about two-thirds of the failures. The success of these results, in addition to the 95 percent to 99 percent survivor bank classificatory power, compares favorably with prior bank failure studies. Thus, we believe the quadratic models provide estimates of bank condition that are sufficiently accurate to be used to examine the relative performance of different bank size groups.

Table C-1

MDA Classification Results of Alternative Models[a]

(Percentage in Parentheses)

MDA Models	Linear Models				Quadratic Models			
	Correct Classifications		Errors in Classifications		Correct Classifications		Errors in Classifications	
	Survivors	Failures	Type I	Type II	Survivors	Failures	Type I	Type II
I.-Factor	998 (99.5%)	16 (20.3%)	5 (0.5%)	63 (79.7%)	958 (95.5%)	42 (53.2%)	45 (4.5%)	37 (46.8%
II.-FDIC	1001 (99.8%)	22 (27.8%)	2 (0.2%)	57 (72.2%)	955 (95.2%)	47 (59.5%)	48 (4.8%)	32 (40.5%)
III.-FRB	1002 (99.9%)	34 (43.0%)	1 (0.1%)	45 (57.0%)	993 (99.0%)	44 (55.7%)	10 (1.0%)	35 (44.3%)
IV.-OCC	1000 (99.7%)	30 (38.0%)	3 (0.3%)	49 (62.0%)	982 (97.9%)	53 (67.1%)	21 (2.1%)	26 (32.9%)

[a] The following tests for model assumptions were conducted:

Model	Equality of Group Dispersion Matrices		Equality of Groups Means	
	F Statistic	Significance Level	F Statistic	Significance Level
I.	110.76	.000	22.76	.002
II.	197.97	.000	27.66	.000
III.	123.87	.000	58.19	.000
IV.	183.91	.000	47.95	.000

APPENDIX D

NOW Accounts and New England Banks

The analysis presented to this point has focused on historical data for a sample of banks throughout the nation in the 1969-1982 period. Given the substantial changes that have occurred in the functions of commercial banks and other depository financial institutions it may be argued that the relevance of the data presented earlier for the future of small banks has been reduced. In particular, the authorization of Negotiable Order of Withdrawal (NOW) accounts, the reduction in the application of regulation Q, and other changes in the functions of financial institutions may have so altered the financial marketplace that historical data has limited relevance. Fortunately, the experience in New England with NOW accounts, dating back to the early 1970s, provides the opportunity for a case study of the impact of deregulation on commercial banks in general and small banks in particular. While the discussion is in terms of NOW vs. non-NOW banks rather than small versus large banks, the findings may have important implications for banks of all sizes, small and large combined.

A sample of banks in New England that offered NOW accounts over the study period was constructed. A separate sample was then constructed of New England banks that did not offer NOW accounts over the period of the study. Comparisons were then made for a large number of financial ratios between NOW and non-NOW banks. A t-test for significant mean ratio differences was performed. These are presented in Table

D-1. Levels of significance are indicated by asterisks (e.g., one, two, and three asterisks correspond, respectively, to the .10, .05, and .01 levels of significance).

As shown in Table D-1, there appear to be few differences in equity ratios between the NOW and non-NOW banks. The ratio of equity to total assets for the NOW banks average .085 in 1970 while this ratio was .086 for the non-NOW banks in the same period. This slight difference was not statistically significant at conventional levels. A similar finding was observed for the ratio of total capital to total assets. Equity capital ratios for the NOW and non-NOW banks were similar before the introduction of NOW accounts and remained similar after the introduction of this type of transaction account. Identical findings were observed for an alternate measure of capital adequacy, the ratio of capital to total assets.

One of the most important potential effects of the deregulation of deposit accounts and of the introduction of NOW accounts may be the impact on profitability. While the evidence from the sample is certainly not definitive, the evidence does suggest some (though minor) effect on profitability, especially as related to net worth. The ratio of net income to total assets for the NOW banks appeared to be slightly higher than the non-NOW banks in the early and mid-1970s (and statistically significant in 1971). However, by 1980 and 1981 there appeared to be no important differences in this ratio between NOW and non-NOW banks. In contrast, there appeared to be a more significant difference between NOW and non-NOW banks with regard to the return on net worth. The NOW

banks' return on net worth was greater than that of the non-NOW banks in the years immediately preceding the introduction of NOW accounts. By the early 1980s, however, the NOW banks' return on net worth had fallen below that of the non-NOW banks. For example, in 1981, the NOW account banks averaged a return of 12.9 percent on net worth versus a 14.0 percent return for the non-NOW banks. This downward trend in NOW bank shareholder returns appears to be a temporary phenomenon, though, as their return on net worth exceeded that of non-NOW banks in 1982 on average.

Portfolio differences between the NOW and non-NOW banks appeared relatively slight. The loan/deposit ratio at the two groups of banks were generally not significantly different either before or after the introduction of the NOW accounts. Similar conclusions were reached by examining the ratio of liquid assets to total assets. In contrast, there did appear to be some difference in the use of short-term purchased funds. After the introduction of NOW accounts, the NOW banks appeared less likely to use purchased funds than the non-NOW banks, a not surprising finding given the access of NOW banks to a greater variety of funding sources.

Analysis of the relative efficiency of the NOW and non-NOW banks before and after the introduction of NOW accounts pointed to few differences. The ratio of operating expenses to operating income was comparable among the two groups of banks both before and after the introduction of NOW accounts. Similar results were observed for the ratio of fixed expenses to operating income. In contrast, there were important differences observed in the ratio of the adjusted net interest on deposits to total assets in the years following the introduction of the NOW accounts, with the NOW banks having a higher ratio than the non-NOW banks.

Table D-1

Financial Ratios for NOW and (Non-NOW) Banks
in New England Over Time: Mean Values and Statistical Tests[a]

	Financial Ratios						
Year	Return on Assets	Return on Net Worth	Equity Capital/ Total Assets	Equity Capital Plus Notes and Debentures/Total Assets	Gross Loans/ Total Deposits	Net Interest On Deposits/ Total Assets	Consumer Loans/ Total Assets
1970	.009 (.009)	.118 (.105)	.085 (.086)	.088 (.090)*	.651 (.649)	.018 (.018)	.164 (.185)
1971	.009 (.008)***	.110 (.101)***	.083 (.086)	.087 (.089)	.655 (.667)	.019 (.019)	.165 (.187)
1972	.008 (.008)	.109 (.100)	.081 (.084)	.085 (.087)	.669 (.682)*	.019 (.019)	.170 (.183)
1973	.009 (.007)**	.116 (.099)***	.084 (.083)	.087 (.087)	.690 (.689)*	.022 (.022)	.174 (.182)
1974	.009 (.008)	.117 (.106)	.086 (.084)	.089 (.089)	.701 (.695)	.028 (.028)	.170 (.177)
1975	.008 (.006)	.100 (.082)***	.085 (.084)	.089 (.088)	.677 (.664)	.027 (.027)	.167 (.170)
1976	.007 (.006)**	.092 (.076)***	.083 (.082)	.086 (.085)	.664 (.650)	.030 (.029)**	.173 (.173)
1977	.007 (.006)**	.098 (.074)***	.080 (.078)	.084 (.081	.675 (.666)	.030 (.029)**	.173 (.173)
1978	.088 (.008)	.108 (.108)	.078 (.076)	.126 (.121)	.725 (.728)	.031 (.030)*	.178 (.175)**
1979	.009 (.009)	.126 (.126)*	.078 (.078)	.081 (.081)	.721 (.714)	.036 (.035)	.176 (.169)**
1980	.009 (.009)	.130 (.135)**	.078 (.077)	.081 (.080)	.685 (.682)	.044 (.043)*	.156 (.156)
1981	.010 (.010)	.129 (.140)***	.081 (.078)	.084 (.082)	.701 (.696)	.051 (.050)	.156 (.156)
1982	.010 (.010)	.141 (.132)	.078 (.081)	.136 (.140)	.665 (.675)	.049 (.050)	.147 (.148)

[a] Asterisks mark significant mean differences: * - ≤ .10, ** -≤ .05, and *** -≤ .01.

Table D-1, Continued
Financial Ratios for NOW (and Non-NOW) Banks
in New England Over Time: Mean Values and Statistical Tests[a]

Year	Financial Ratios						
	Real Estate Loans/ Total Assets	Residential Real Estate/ Total Assets	Commercial Real Estate/ Total Assets	Farm Loans/ Total Assets	Commercial and Industrial Loans/ Total Loans	U.S. Treasury Securities/ Total Assets	Liquid Assets/ Total Assets
1970	.212 (.210)	.145 (.139)	.063 (.064)	.009 (.006)**	.291 (.263)	.103 (.106)	.371 (.351
1971	.217 (.222)	.150 (.145)	.064 (.070)	.009 (.006)**	.291 (.255)	.095 (.100)	.365 (.315)
1972	.229 (.283)	.157 (.153)	.069 (.079)	.008 (.005)**	.286 (.256)	.087 (.083)	.347 (.336)
1973	.239 (.241)	.158 (.154)	.078 (.082)	.010 (.006)***	.271 (.259)	.067 (.072)	.329 (.309)
1974	.237 (.238)	.157 (.155)	.080 (.083)	.007 (.004)***	.291 (.271)	.055 (.059)**	.325 (.311)
1975	.232 (.233)	.153 (.151)	.078 (.082)	.006 (.004)***	.278 (.273)	.073 (.083)	.337 (.335)
1976	.242 (.235)	.149 (.147)	.087 (.081)*	.007 (.004)***	.279 (.277)	.088 (.084)	.337 (.343)
1977	.256 (.257)	.159 (.163)	.089 (.087)	.007 (.004)***	.274 (.264)	.080 (.077)	.335 (.325)
1978	.278 (.290)	.170 (.184)	.091 (.090)	.007 (.003)***	.262 (.249)	.072 (.069)	.324 (.315)
1979	.276 (.287)	.171 (.184)	.090 (.088)	.008 (.003)***	.258 (.241)	.073 (.066)**	.323 (.311)
1980	.263 (.274)	.162 (.176)	.086 (.084)	.006 (.003)***	.271 (.248)	.083 (.079)	.350 (.341)
1981	.267 (.267)	.166 (.172)	.086 (.080)	.007 (.003)***	.269 (.258)	.078 (.074)*	.342 (.338)
1982	.250 (.259)	.159 (.161)	.076 (.080)	.008 (.003)*	.272 (.265)	.074 (.072)	.333 (.331)

[a] Asterisks mark significant mean differences: * $\leq$ .10, ** $\leq$ .05, and *** $\leq$ .01.